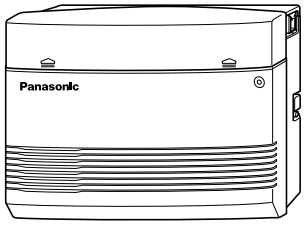
Panasonic

Advanced Hybrid System

Installation Manual



MODEL NO. KX-TA624

Please read this manual before connecting the Advanced Hybrid System.

System Highlights

System Capacity

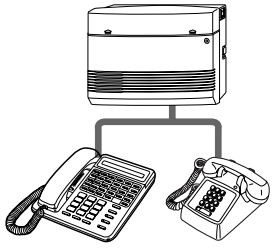
Basic System	Extensions	8
	Exchange lines	3
Expansion	Maximum extensions	24
	Maximum exchange lines	6

Special System Points

System Expansion

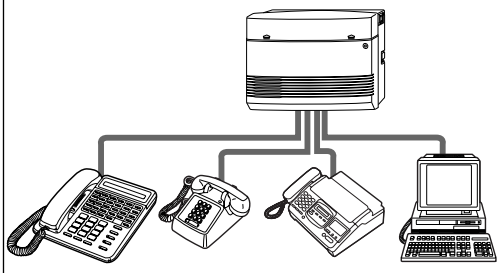
This system can expand the exchange lines and extension capacity by installing an optional card.

☞ 2– 24



Hybrid

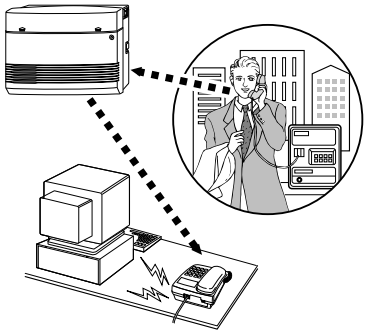
This system can accept Panasonic analogue proprietary telephones. Also, single line devices such as single line telephones, facsimiles and data terminals can be connected.



Calling from the outside (Direct Inward System Access)

External callers can call extensions in the system. If you install an optional card, an outgoing message will greet the caller and give information about how to access an extension.

☞ 3– 22



Precautions

FOR YOUR SAFETY PLEASE READ THE FOLLOWING TEXT CAREFULLY.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience. A 5 amp fuse is fitted in this plug.
Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5 amps and that it is approved by ASTA or BSI to BS1362.

Check for the ASTA mark or the BSI mark on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.
If you lose the fuse cover the plug must not be used until a replacement cover is obtained.
A replacement fuse cover can be purchased from your local Panasonic Dealer.

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.
THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13 AMP SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.
If in any doubt please consult a qualified electrician.

WARNING : THIS APPLIANCE MUST BE EARTHED.
IMPORTANT : The wires in this mains leads are coloured in accordance with the following code:

Green-and-yellow:	Earth
Blue:	Neutral
Brown:	Live

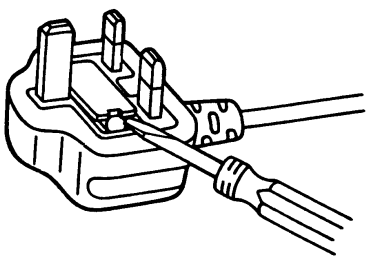
As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows.

The wire which is coloured GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked with the letter E or by the safety earth symbol ⏚ or coloured GREEN or GREEN-AND-YELLOW.

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

How to replace the fuse : Open the-fuse compartment with a screwdriver and replace the fuse and fuse cover.



Precautions

This equipment should be used on PSTN lines requiring 2-wire Loop calling unguarded clearing with Loop Disconnect or DTMF address signalling.
The equipment must be connected to direct extension lines and a payphone should not be connected as an extension.

Operation in Power Failure
In the event of a power failure, two single line telephones connected to extension ports 01 and 09 will be directly connected to the following Exchange lines:

Exchange line 1 : extension port 01
Exchange line 4 : extension port 09

- Set the Dialling Mode (Tone or Pulse) of your telephone, according to the Exchange line.
- 999 and 112 can be dialled on the apparatus for the purpose of making outgoing calls to the BT emergency (999) and (112) service.

Satisfactory performance can not be guaranteed for every allowed combination of host and subsidiary apparatus.

999 and 112 can be dialled on the apparatus after accessing the Exchange line for the purpose of making outgoing calls to the BT emergency (999) and (112) service.

During dialling, this apparatus may tinkle the bells of other telephones using the same line. this is not a fault and we advise you not to call Fault Repair Service.

'**Prevention of access by user.** This apparatus is intended to be accessible only to authorised personnel. This apparatus must be installed in a locked room or similar environment, such that user access is prevented. Failure to prevent such user access will invalidate any approval given to this apparatus.'

Caution:
Do not push the PAUSE button more than twice following the initial access digit (or digits). Failure to comply with this requirement may result in unsatisfactory operation.

Notice:
This PBX should only be used on B•T lines on which specific BT services or facilities are provided.

CAUTION

Danger of explosion if battery is incorrectly replaced.

Replace only with the same or equivalent type recommended by the manufacturer.
Dispose of used batteries according to the manufacturer's instructions.

Precautions

- The apparatus is designed to be installed and operated under controlled conditions of ambient temperature and a relative humidity not greater than 60 %.
- Avoid installing the apparatus in damp or humid environments, such as bathrooms or swimming pools.
- The apparatus shall not be exposed to dripping or splashing.
- Keep the unit away from heating appliances and electrical noise generating devices such as fluorescent lamps, motors and televisions. These noise sources can interfere with the performance of the Advanced Hybrid System.
- This unit should be kept free of dust, moisture, high temperature (more than 40 ˚C) and vibration, and should not be exposed to direct sunlight.
- Never attempt to insert wires, pins, etc. into the vents or other holes of this unit.
- If there is any trouble, disconnect the unit from the telephone line. Plug a single line telephone into the telephone line. If the telephone operates properly, do not reconnect your system to the line until the system has been repaired. If the telephone does not operate properly, chances are that the problem is in the telephone network, and not in your system.
- Do not use benzine, thinner, or the like, or any abrasive powder to clean the cabinet. Wipe it with a soft cloth.

WARNING

THIS UNIT MAY ONLY BE INSTALLED AND SERVED BY QUALIFIED SERVICE PERSONNEL.

WHEN A FAILURE OCCURS WHICH RESULTS IN THE INTERNAL PARTS BECOMING ACCESSIBLE, DISCONNECT THE POWER SUPPLY CORD IMMEDIATELY AND RETURN THIS UNIT TO YOUR DEALER.

DISCONNECT THE TELECOM CONNECTION BEFORE DISCONNECTING THE POWER CONNECTION PRIOR TO RELOCATING THE EQUIPMENT, AND RECONNECT THE POWER FIRST.

THIS UNIT IS EQUIPPED WITH AN EARTHING CONTACT PLUG. FOR SAFETY REASONS THIS PLUG MUST ONLY BE CONNECTED TO AN EARTHING CONTACT SOCKET WHICH HAS BEEN INSTALLED ACCORDING TO REGULATIONS.

THE POWER SUPPLY CORD IS USED AS THE MAIN DISCONNECT DEVICE, ENSURE THAT THE SOCKET-OUTLET IS LOCATED/INSTALLED NEAR THE EQUIPMENT AND IS EASILY ACCESSIBLE.

TO PREVENT THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

Precautions

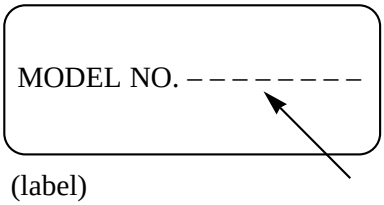
For your future reference

SERIAL NO. _____ DATE OF PURCHASE _____
(found on the bottom of the unit)

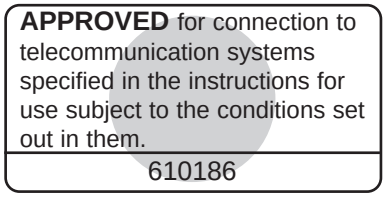
NAME OF DEALER _____

DEALER'S ADDRESS _____

Note • This Installation Manual does not show the complete model number that indicates the country where your equipment should be used. The model number of your unit is found on the label affixed to the unit.



(label)


APPROVED for connection to telecommunication systems specified in the instructions for use subject to the conditions set out in them.
610186

Warning:
This is a Class A Product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

This unit complies with the EU Directives.

CE

73 / 23 / EEC "Electrical equipment for use within certain voltage limits."
89 / 336 / EEC "Electromagnetic compatibility" (basic standard)
92 / 31 / EEC "Electromagnetic compatibility" (amendment)
93 / 68 / EEC "Marking"

The CE mark on this unit certifies compliance with the above mentioned Directives.

Structure of the Manual

This manual consists of the following sections:

Section 1. Basic System Construction

Provides general information on the system including connection diagrams.

Section 2. Installation

Contains the system installation and wiring instructions, as well as how to install the optional cards.

Section 3. Features

Describes the optional and programmable features in alphabetical order. It also provides information about the conditions, required System Programming, connection references, related features and operating instructions references for every feature.

Section 4. System Programming

Describes the steps required to assign features to extensions or to the system.

Section 5. Appendix

Provides specifications and the default values of the System Programming.

Section 6. Troubleshooting

Provides information for system and telephone troubleshooting.

Section 7. Programming Tables

Provides programming tables for user-programmed data.

Description of the Symbols Mainly Used in this manual

Additional information and conditions.

The feature or program references.

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Template

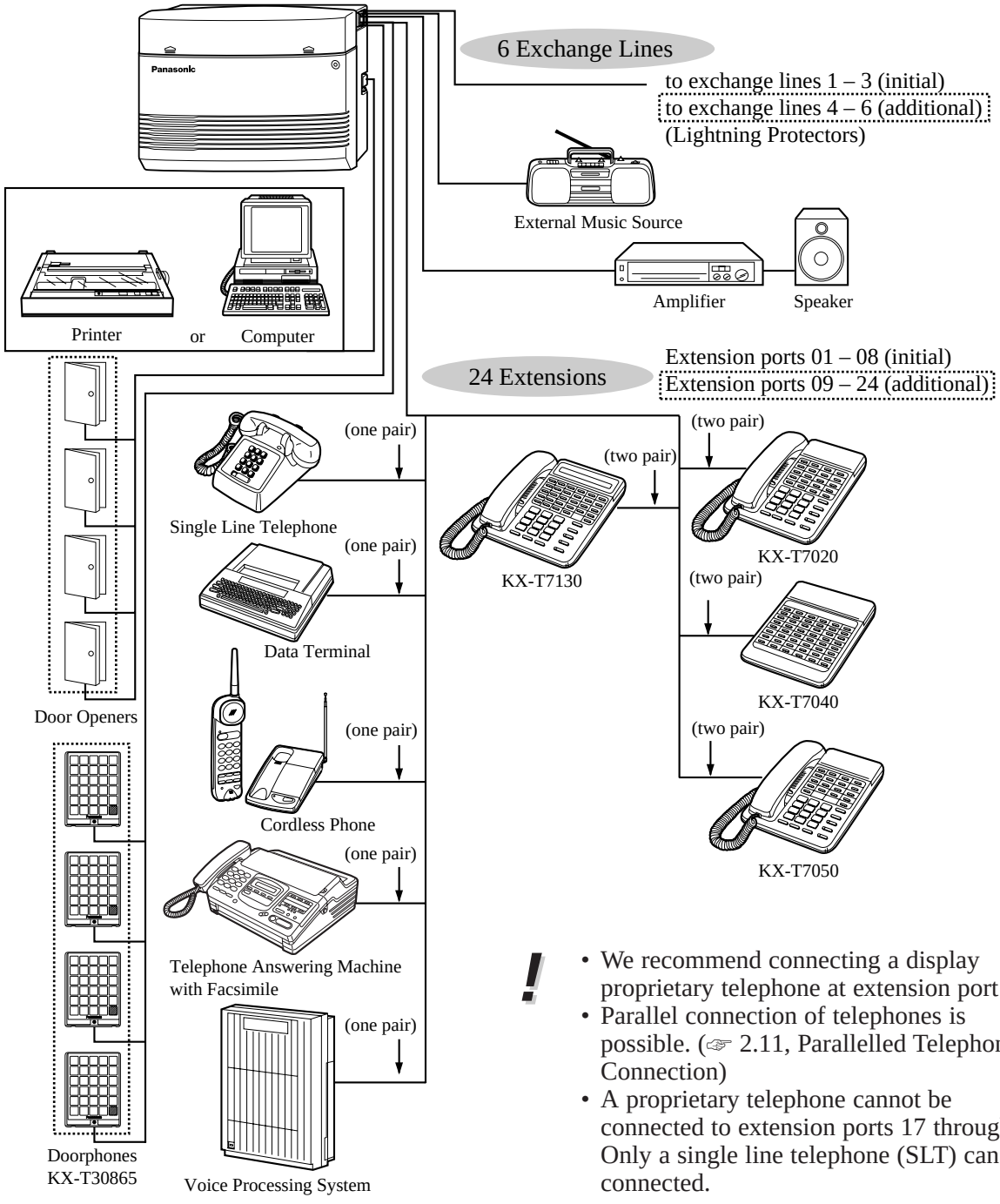
Section 1
Basic System Construction

1 Basic System Construction

The KX-TA624 has a basic capacity of 8 extensions and 3 exchange lines. It is capable of supporting Panasonic analogue proprietary telephones, and single line devices such as single line telephones, facsimiles and data terminals.

To expand its capabilities, the system can be equipped with optional components or customer-supplied peripherals such as an external speaker, external music source (e.g. a radio) and door opener.

System Connection Diagram



- We recommend connecting a display proprietary telephone at extension port 01.
- Parallel connection of telephones is possible. (☞ 2.11, Parallelled Telephone Connection)
- A proprietary telephone cannot be connected to extension ports 17 through 24. Only a single line telephone (SLT) can be connected.

: needs optional card.

Section 2
Installation

2.1 Before Installation

Please read the following notes concerning installation and connection before installing the system and terminal equipment.

Safety Installation Instructions

When installing telephone wiring, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following:

1. Never install telephone wiring during a lightning storm.

2. Never install telephone ports in wet locations unless the port is specifically designed for wet locations.

3. Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.

4. Use caution when installing or modifying telephone lines.

Installation Precautions

This system is designed for wall mounting only. Avoid installing in the following places. (Doing so may result in malfunction, noise, or discolouration.)

1. In direct sunlight and hot, cold, or humid places. (Temperature range: 0 °C – 40 °C)

2. Sulphuric gases produced in areas where there are thermal springs, etc. may damage the equipment or contacts.

3. Places in which shocks or vibrations are frequent or strong.

4. Dusty places, or places where water or oil may come into contact with the system.

5. Near high-frequency generating devices such as sewing machines or electric welders.

6. On or near computers, telexes, or other office equipment, as well as microwave ovens or air conditioners. (It is preferable not to install the system in the same room with the above equipment.)

7. Install at least 1.8 m away from radios and televisions. (Both the system and Panasonic proprietary telephones)

8. Do not obstruct area around the system (for reasons of maintenance and inspection — be especially careful to allow space for cooling above and at the sides of the system).

Wiring Precautions

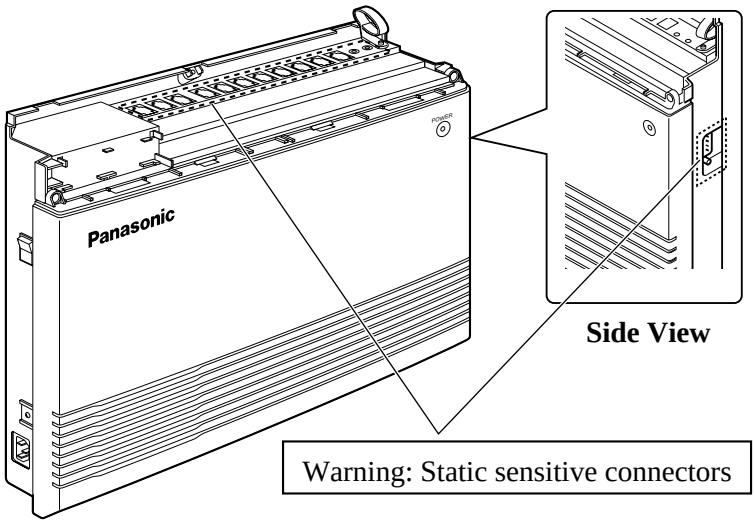
Be sure to follow these instructions when wiring the unit:

1. Do not wire the telephone cable in parallel with an AC power source, computer, telex, etc. If the cables are run near those wires, shield the cables with metal tubing or use shielded cables and ground the shields.

2. If cables are run on the floor, use protectors to prevent the wires from being stepped on. Avoid wiring under carpets.

3. Avoid using the same power supply outlet for computers, telexes, and other office equipment. Otherwise, the system operation may be interrupted by the induction noise from such equipment.

4. Please use one pair telephone wire for extension connection of (telephone) equipment such as single line telephones, data terminals, answering machines, computers, voice processing systems, etc., except Panasonic proprietary telephones (e.g. KX-T7130).
5. Unplug the system during wiring. After all of the wiring is completed, plug in the system.
6. Mis-wiring may cause the system to operate improperly. Refer to Section 6.1 “While Installing” and Section 6.2 “While Connecting”.
7. If an extension does not operate properly, disconnect the telephone from the extension line and then connect again, or turn off the Power Switch of the system and then on again.
8. The system is equipped with a 3-wire grounding type plug. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the purpose of the grounding-type plug.
9. Exchange lines should be installed with lightning protectors. For details, refer to Section 2.7 “Exchange Line Connection”, Installing Lightning Protectors.



Warning:
Static sensitive devices are used. To protect printed circuit boards from static electricity, do not touch connectors indicated to the left. To discharge body static, touch ground or wear a grounding strap.

2.2 Unpacking

Unpack the box and check the items below.

Main Unit	1
AC Cord Order No. PSWAT206E	1
Telephone Line Cords (2-conductor wiring) Order No. PSJA1066Z	3
Telephone Line Cords (4-conductor wiring) Order No. PQJA151Z	8
Screws (Wall Mounting) Order No. PQHE5004Z	3
Washers (Wall Mounting) Order No. XWG35FY	3
Pager Connector Order No. PQJP1E1Z	1

Music Source Connector Order No. PQJP1E1Z	1
Installation Manual Order No. PSQX1708Y	1
Operating Instructions Order No. PSQX1709Y	1
Operating Instructions for the Caller ID Card Order No. PSQX1744Y	1
SLT User Guide Order No. PSQX1753Z	2
System Clear Leaflet Order No. PSQW1412Y	1
Feature Number Leaflet Order No. PSQW1472Y	1

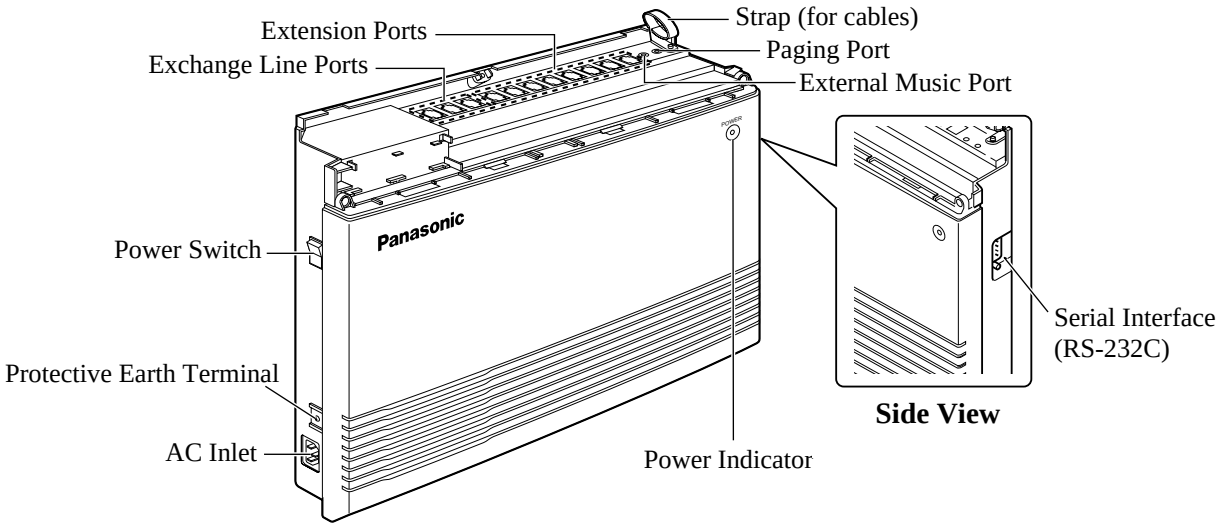
Optional Cards (For your reference)

KX-TA62460	
Screws Order No. XYN3+F12FN	1
Terminal Boxes Order No. PQJS1T30Z	2
Telephone Line Cords (4-conductor wiring) Order No. PQJA48W	2

KX-TA62474	
Screws Order No. XYN3+F8	2
Extension Connectors Order No. PSJP36A67Z	2

KX-TA62477	
Extension Bolts Order No. PSHE1051Z	2
Extension Connectors Order No. PSJP36A67Z	2
Spacer Order No. PSHR1172Z	1

2.3 Names and Locations

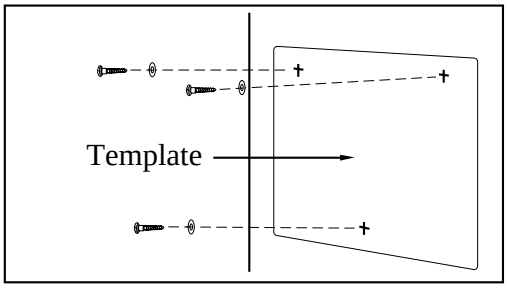


2.4 Wall Mounting

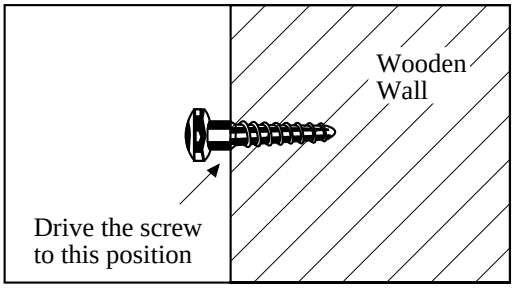
This set is designed for wall mounting only. The wall where the main unit is to be mounted must be able to support the weight of the main unit. If screws other than the ones supplied are used, use screws with the same diameter as the ones enclosed.

Mounting on a Wooden Wall

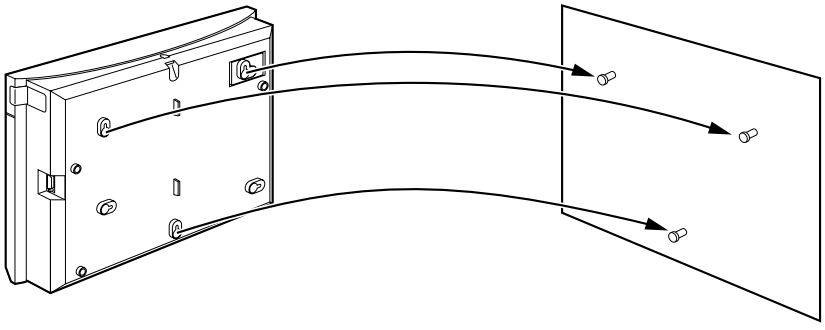
1. Place the template (on the last page) on the wall to mark the screw positions.



2. Install the screws (included) into the wall.



3. Hook the main unit on the screw heads.



2.5 Frame Ground Connection

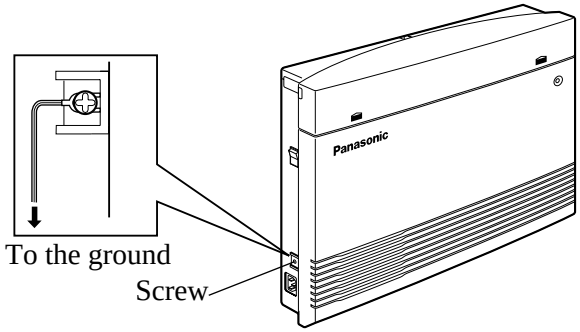
IMPORTANT!!!

Connect the frame of the main unit to the ground.

1. Loosen the screw.

2. Insert the grounding wire (user-supplied).

3. Tighten the screw.

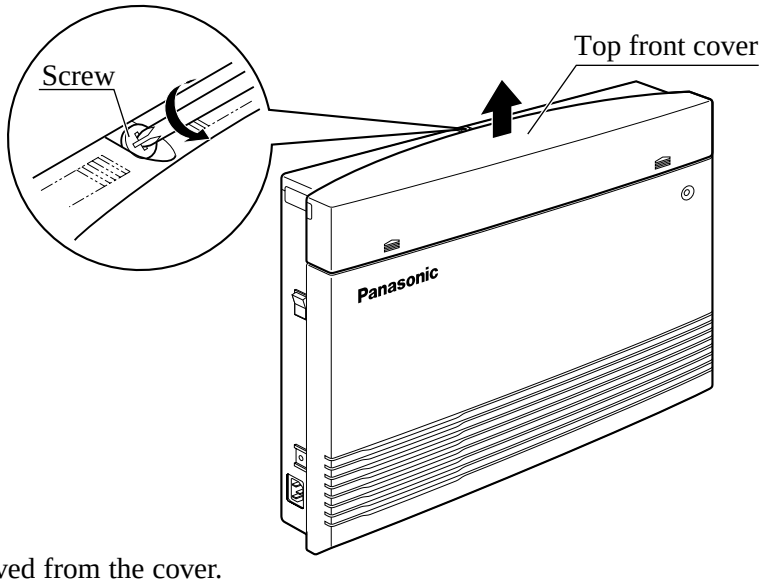


4. Connect the grounding wire to the ground.

2.6 Opening the Top Front Cover

1. Loosen the screw.

2. Remove the top front cover.



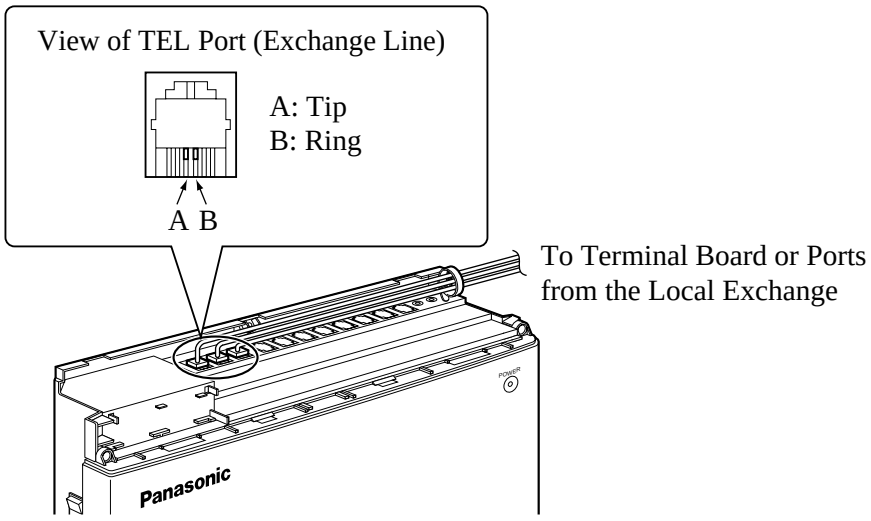
- The screw cannot be removed from the cover.

2.7 Exchange Line Connection

Connection

1. Insert the modular plugs of the telephone line cords (2-conductor wiring) into the ports (CO 1 through 3) on the system.

2. Connect the line cords to the terminal board or the ports from the Local Exchange.



- Exchange Line ports are at TNV.

Installing Lightning Protectors

A lightning protector is a device to be installed on an exchange line to prevent a dangerous surge from entering the building and damaging the equipment.

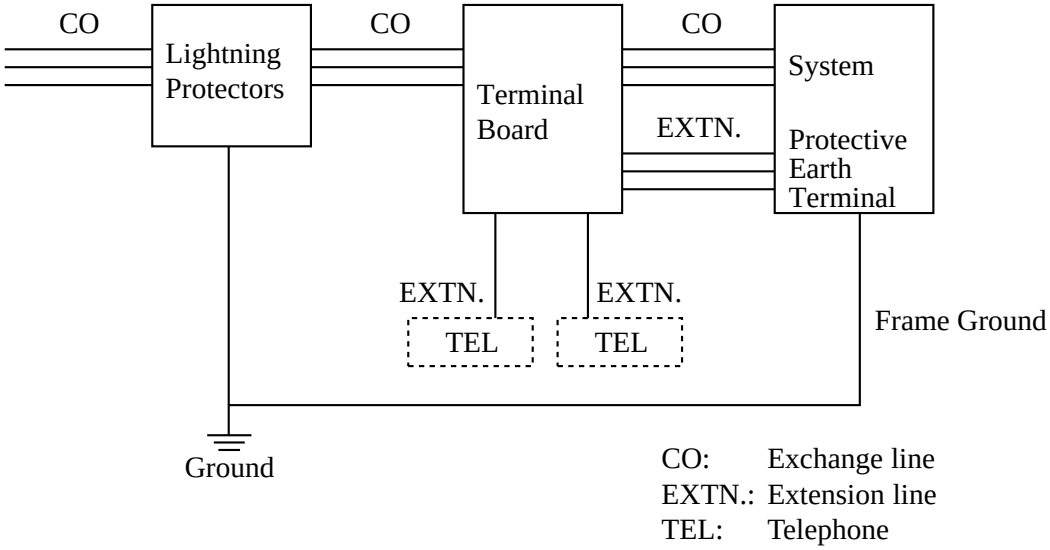
A dangerous surge can occur if a telephone line comes in contact with a power line. Problems due to lightning surges have been steadily increasing with the development of electronic equipment.

In many countries, there are regulations requiring the installation of a lightning protector. A lightning strike to a telephone cable which is 10 m above ground can be as high as 200 000 V.

This system should be installed with lightning protectors. In addition, grounding (connection to earth ground) is very important to protect the system (☞ 2.5, Frame Ground Connection).

2.7 Exchange Line Connection

Installation

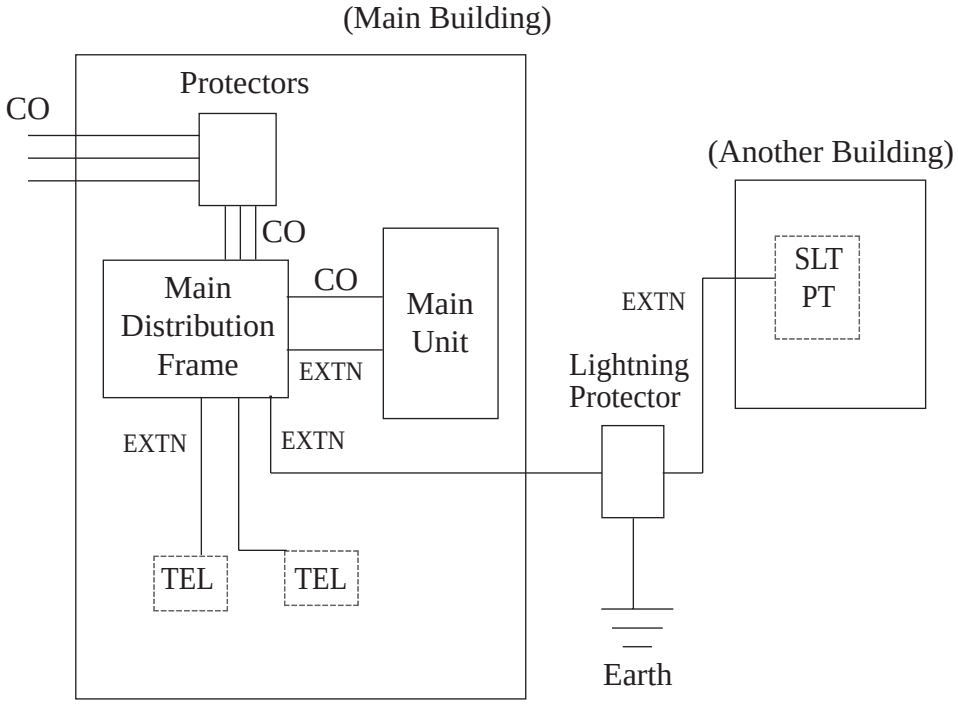


Outside Installation

If you install an extension outside of the main building, the following precautions are recommended:

(1) Install the extension wire underground.

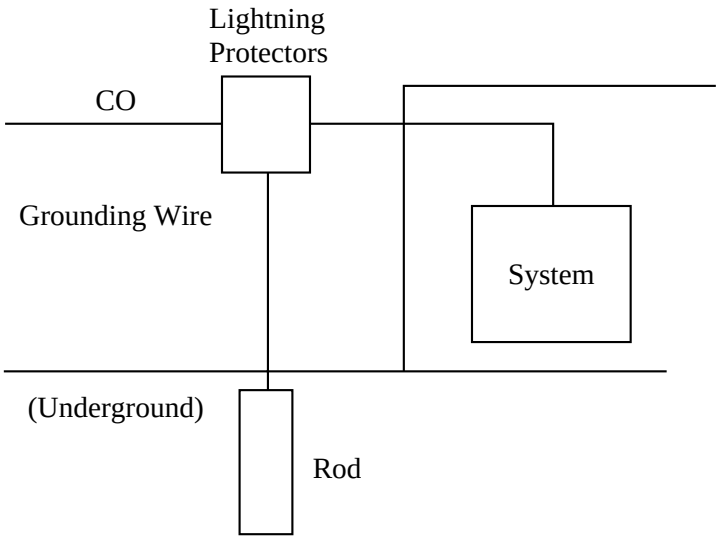
(2) Use a conduit to protect the wire.



Note • The lightning protector for an extension is different from that for CO.

2.7 Exchange Line Connection

Installation of an Earth Rod



1) Installation location of the earth rod . . . . . Near the protector
2) Check obstructions . . . . . None
3) Composition of the earth rod . . . . . Metal
4) Depth of the earth rod . . . . . More than 50 cm
5) Size of the grounding wire . . . . . Thickness more than ø1.6 mm

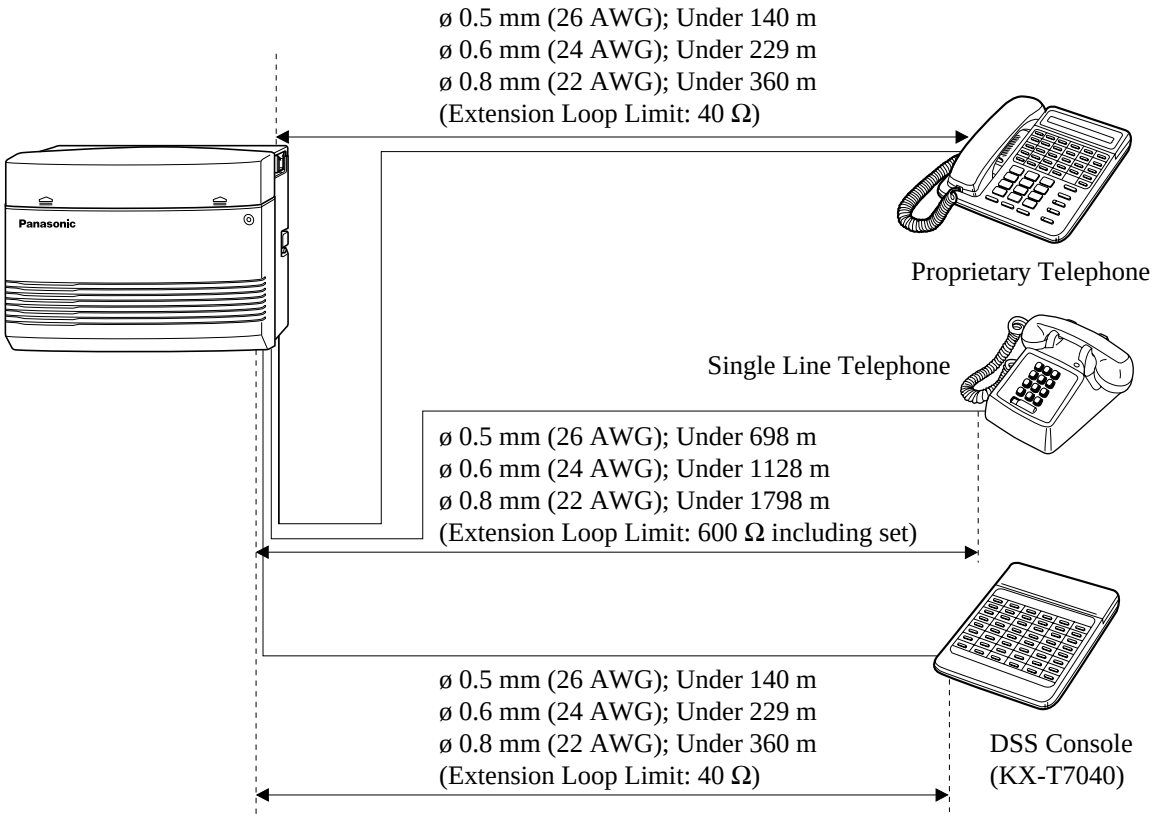
Note • The above example is only a recommendation.
• The length of the earth rod and required depth depend on the composition of the soil.

2.8 Extension Connection

Extension ports 01 through 08 can be used for all kinds of telephones.

Telephone Wiring

The maximum length of the extension line cord (twisted cable) which connects the system and the extension is as follows.


ø 0.5 mm (26 AWG); Under 140 m
ø 0.6 mm (24 AWG); Under 229 m
ø 0.8 mm (22 AWG); Under 360 m
(Extension Loop Limit: 40 Ω)
Panasonic
Proprietary Telephone
Single Line Telephone
ø 0.5 mm (26 AWG); Under 698 m
ø 0.6 mm (24 AWG); Under 1128 m
ø 0.8 mm (22 AWG); Under 1798 m
(Extension Loop Limit: 600 Ω including set)
ø 0.5 mm (26 AWG); Under 140 m
ø 0.6 mm (24 AWG); Under 229 m
ø 0.8 mm (22 AWG); Under 360 m
(Extension Loop Limit: 40 Ω)
DSS Console
(KX-T7040)

2 or 4-conductor wiring is required for each extension as listed below. There are 4 pins possible for connection: “T” (Tip), “R” (Ring), “L” (Low) and “H” (High).

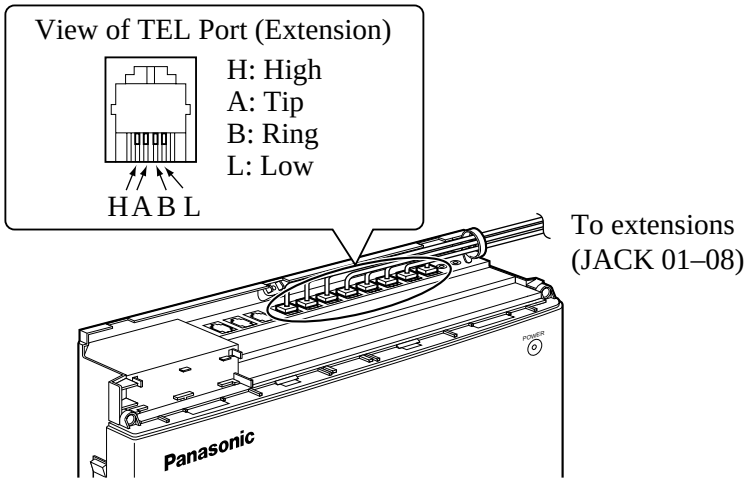
Telephone	Wiring
Single line telephones	1 pair wire (A,B)
Proprietary telephone (e.g., KX-T7130)	2 pair wire (L, H, A, B)

- If a telephone or answering machine with an A-A1 relay is connected to the system, set the A-A1 relay switch on the telephone or answering machine to the OFF position.
- Extension ports are at TNV.

2.8 Extension Connection

Connection

Insert the modular plugs of the telephone line cords (2 or 4-conductor wiring) into the ports (JACK 01 through 08) on the system.



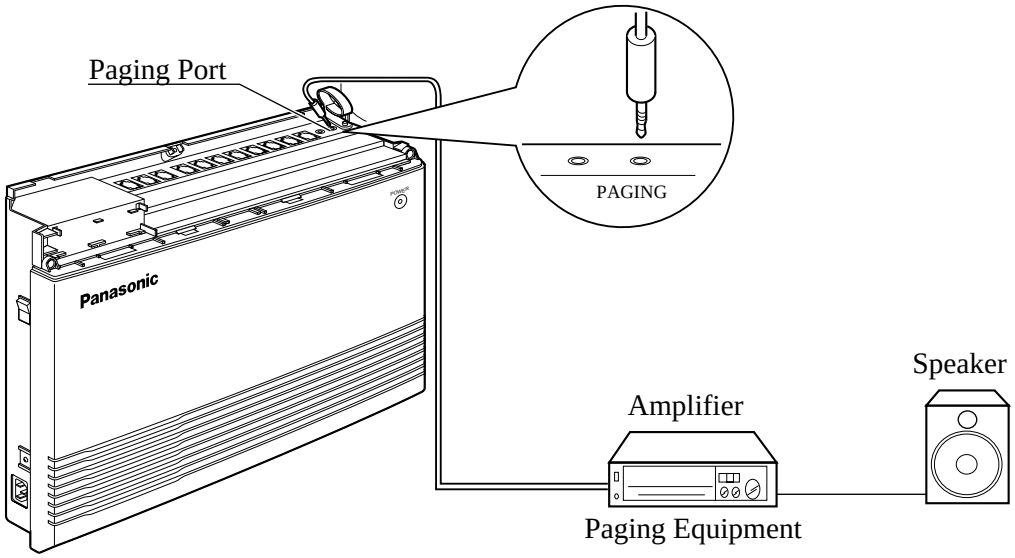
- System extensions must be located within the same building as the KX-TA624.

2.9 External Pager (Paging Equipment) Connection

One external pager (user-supplied) can be connected to the system as illustrated below.

Use an EIAJ RC-6701 A plug (2-conductor, ø 3.5 mm in diameter).
• Output impedance: 600 Ω

Maximum length of the cable
ø 0.8 mm – ø 1.3 mm: Under 10 m



- To adjust the sound level of the pager, use the volume control on the amplifier.
- Paging port is at SELV.

- **Required System Programming**
  Section 4.2, System Programming
  [106] External Paging Access Tone
- **Feature Reference**
  Section 3, Features
  Paging

2.10 External Music Connection

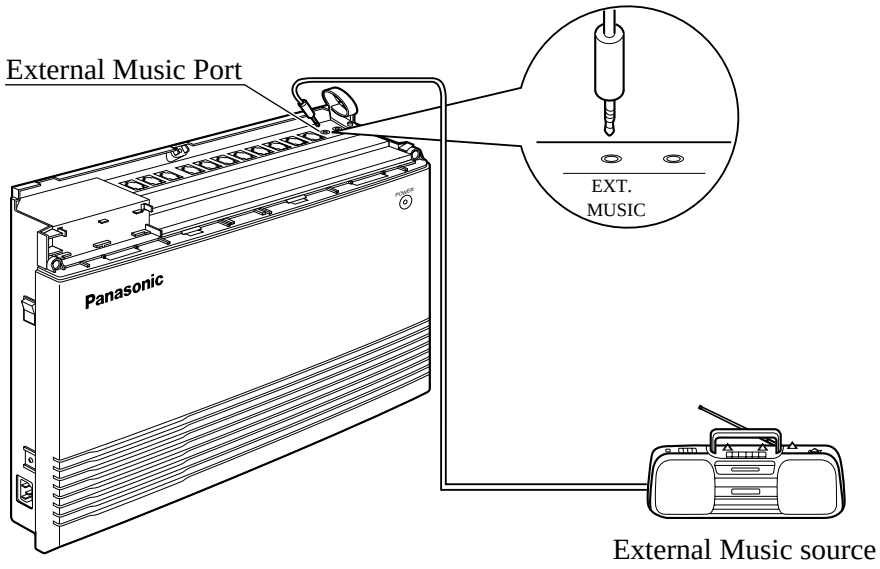
One music source, such as a radio (user-supplied), can be connected to the system as illustrated below.

Insert the plug to the earphone/headphone port on the external music source.
Use an EIAJ RC-6701 A plug (2-conductor, ø 3.5 mm in diameter).

• Input impedance: 8 Ω

Maximum length of the cable

ø 0.8 mm – ø 1.3 mm: Under 10 m



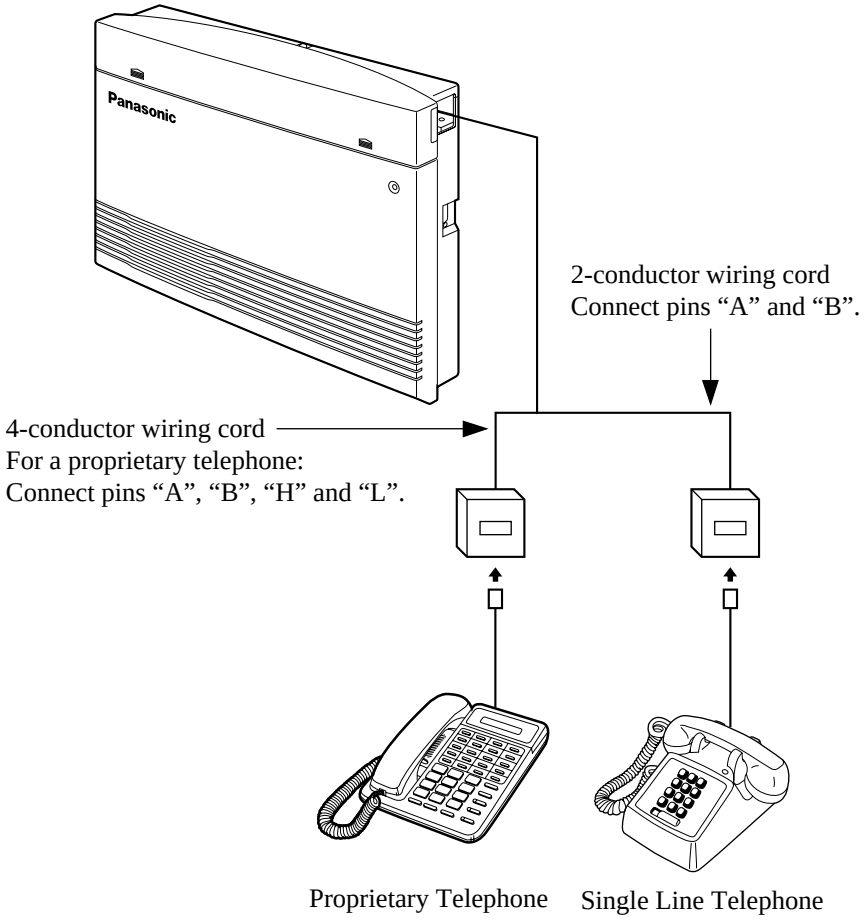
- System programming for the music sources used for Music on Hold and Background Music (BGM) is required.
- To adjust the sound level of the Music on Hold, use the volume control on the external music source.
- External Music port is at SELV.

- **Required System Programming**
  Section 4.2, System Programming
  [111] Hold Music Selection
- **Feature Reference**
  Section 3, Features
  Music on Hold / Background Music (BGM)

2.11 Parallelled Telephone Connection

Any single line telephone can be connected in parallel with a proprietary telephone as follows.

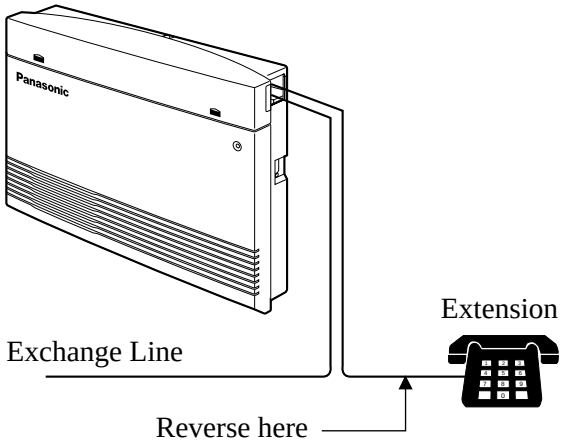
Using a Modular T-Adaptor

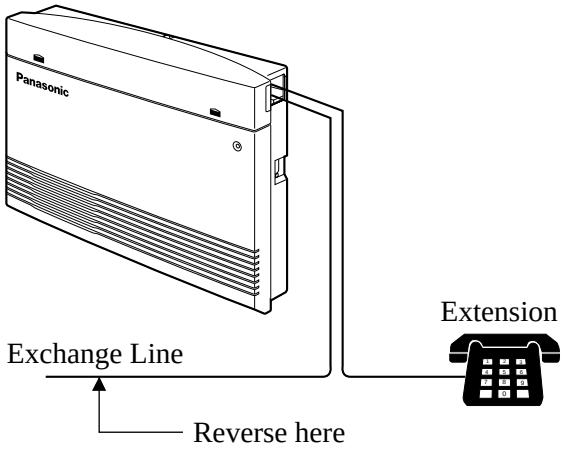


- **Required System Programming**
  Section 4.2, System Programming
  [610] Parallelled Telephone Connection
- **Feature Reference**
  Section 3, Features
  Parallelled Telephone Connection

2.12 Polarity Sensitive Telephone Connection

If your telephone is polarity sensitive, follow the procedure below:





1. Complete all the required extension wiring.

2. Confirm that dialling can be done from all the extensions using a touch-tone telephone.
If dialling fails, the polarity between the extension and the system must be reversed.

3. Reverse as shown.

4. Unplug the system.

5. Connect all exchange lines.

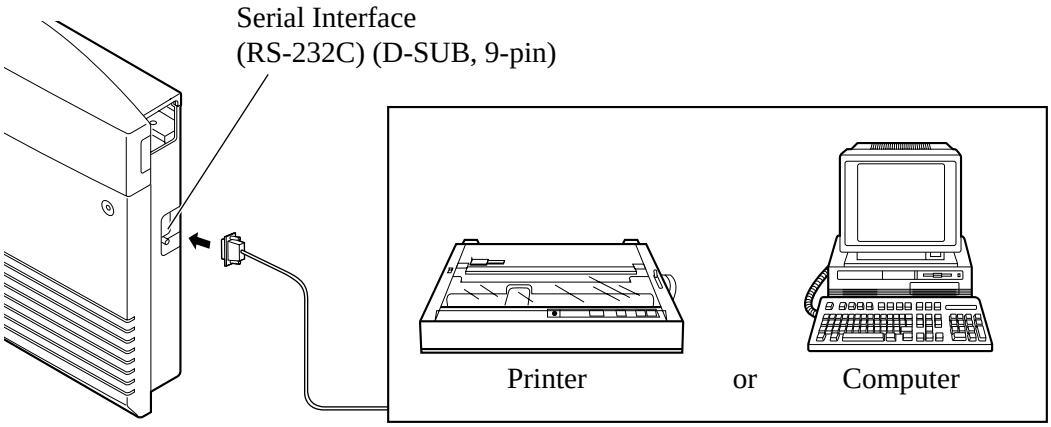
6. Confirm that dialling can be done on the following extension using a touch-tone telephone.
Extension (A, B) of port 01: Exchange line 1
If dialling fails, the polarity between the system and the exchange line must be reversed.

7. Reverse as shown.

8. Every time an extension telephone is replaced, repeat the procedure above.

2.13 Printer and PC Connection

A user-supplied printer or personal computer (PC) can be connected to the system. These are used to print out or refer to the SMDR call records and system programming data. Connect the printer cable or the PC cable to the Serial Interface (RS-232C) connector. The cable must be shielded and the maximum length is 2 m.



Arrange the cables so that the printer will be connected to the system as shown in the appropriate chart on the following page.

The pin configuration of the Serial Interface (RS-232C) Connector is as follows.

Pin No.	Signal Name		Circuit Type	
			EIA	CCITT
2	RXD	Received Data	BB	104
3	TXD	Transmitted Data	BA	103
4	DTR	Data Terminal Ready	CD	108.2
5	SG	Signal Ground	AB	102
6	DSR	Data Set Ready	CC	107
7	RTS	Request To Send	CA	105
8	CTS	Clear To Send	CB	106

2.13 Printer and PC Connection

Connection Chart for a Printer / Personal Computer with the System

If you connect a printer or a PC with a 9-pin cable, follow the chart below.

System				9-pin Cable Printer/PC		
Circuit type (EIA)	**Signal name**	**Pin no.**		**Pin no.**	**Signal name**	**Circuit type (EIA)**
BB	RXD	2	↔	2	RXD	BB
BA	TXD	3	↔	3	TXD	BA
CD	DTR	4	↔	4	DTR	CD
AB	SG	5	↔	5	SG	AB
CC	DSR	6	↔	6	DSR	CC
CA	RTS	7	↔	7	RTS	CA
CB	CTS	8	↔	8	CTS	CB

If you connect a printer or a PC with a 25-pin cable, follow the chart below.

System				25-pin Cable Printer/PC		
Circuit type (EIA)	**Signal name**	**Pin no.**		**Pin no.**	**Signal name**	**Circuit type (EIA)**
BB	RXD	2	↔	3	RXD	BB
BA	TXD	3	→	2	TXD	BA
CD	DTR	4	→	20	DTR	CD
AB	SG	5	↔	7	SG	AB
CC	DSR	6	←	6	DSR	CC
CA	RTS	7	→	5	CTS	CB
CB	CTS	8	←	8	DCD	CF
				1	FG	AA

2.13 Printer and PC Connection

Serial Interface (RS-232C) Signals

Frame Ground: FG

Connects the unit frame and the earth ground conductor of the AC power cord.

Transmitted Data: SD (TXD) . . . . . (output)

Conveys signals from the unit to the printer. A “Mark” condition is held unless data or BREAK signals are being transmitted.

Received Data: RD (RXD) . . . . . (input)

Conveys signals from the printer.

Request to Send: RS (RTS) . . . . . (output)

This lead remains ON whenever DR (DSR) is ON.

Clear To Send: CS (CTS) . . . . . (input)

When the CS (CTS) circuit is ON, it indicates that the printer is ready to receive data from the unit. The unit does not attempt to transfer data or receive data when the CS (CTS) circuit is OFF.

Data Set Ready: DR (DSR) . . . . . (input)

When the DR (DSR) circuit is ON, it indicates the printer is ready. The DR (DSR) circuit being ON does not indicate that communication has been established with the printer.

Signal Ground: SG

Connects the DC ground of the unit for all interface signals.

Data Terminal Ready: ER (DTR) . . . . . (output)

This signal line is turned ON by the unit to indicate that it is ON

LINE. The ER (DTR) circuit being ON does not indicate that communication has been established with the printer. It is switched OFF when the unit is OFF LINE.

Data Carrier Detect: CD (DCD) . . . . . (input)

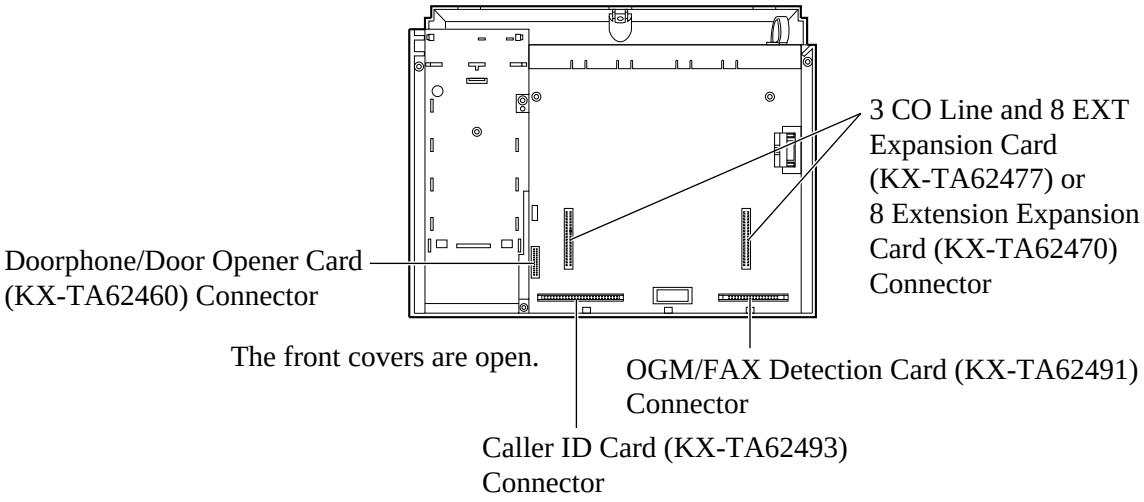
When ON, it indicates the data terminal (DTE) that the carrier signal is being received.

- **Required System Programming**
  Section 4.2, System Programming
  [800] SMDR RS-232C Communication Parameters
  [801] SMDR Parameter
- **Feature Reference**
  Section 3, Features
  Station Message Detail Recording (SMDR)

2.14 Location of Optional Cards

The location of the optional cards is shown below.

Precaution To protect the printed circuit boards (P-boards) from static electricity, do not touch parts on the P-boards in the main unit and on the optional cards. If accessing the parts is required, wear a grounding strap.


3 CO Line and 8 EXT Expansion Card (KX-TA62477) or 8 Extension Expansion Card (KX-TA62470) Connector
Doorphone/Door Opener Card (KX-TA62460) Connector
The front covers are open.
OGM/FAX Detection Card (KX-TA62491) Connector
Caller ID Card (KX-TA62493) Connector

NOTE:

Power off the system, and unplug the AC cord before installing an optional card.

2.15 OGM/FAX Detection Card Installation

An optional OGM/FAX Detection Card (KX-TA62491) can be installed to the system.

The OGM/FAX Detection Card supports the following.

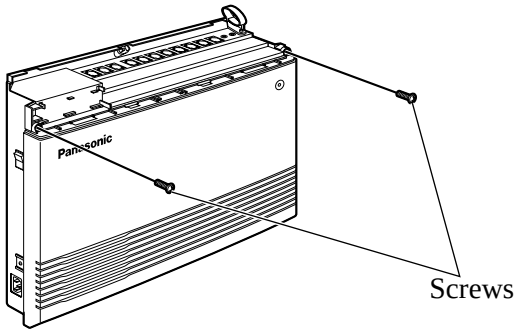
Direct Inward System Access (DISA) with OGM:

One of the system features. An outgoing message greets the external caller and gives information so that the caller can access an extension(s) directly.

Facsimile detection:

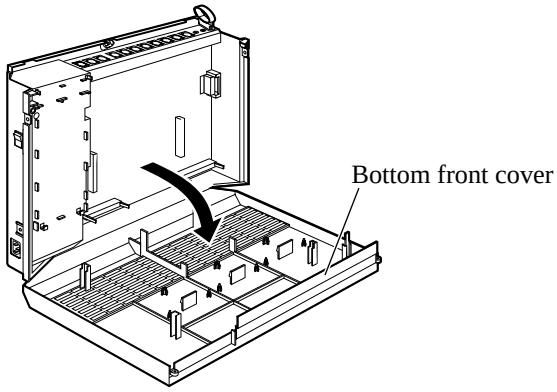
When the system receives a facsimile transmission signal by DISA, it automatically connects the specified facsimile extension.

1. Remove the 2 screws.

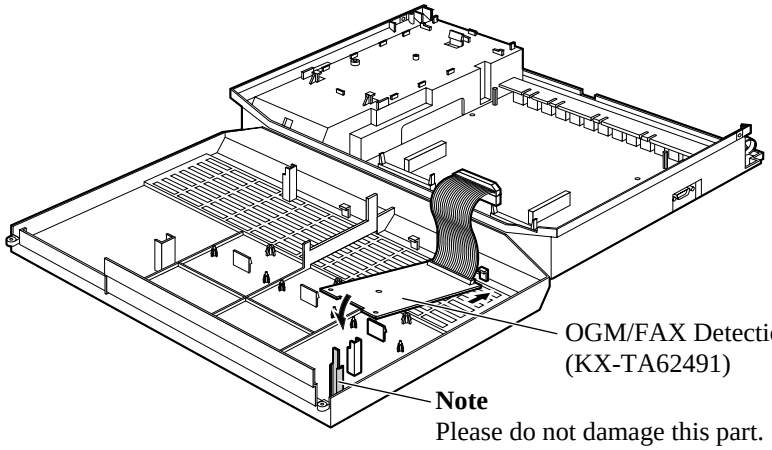


2.15 OGM/FAX Detection Card Installation

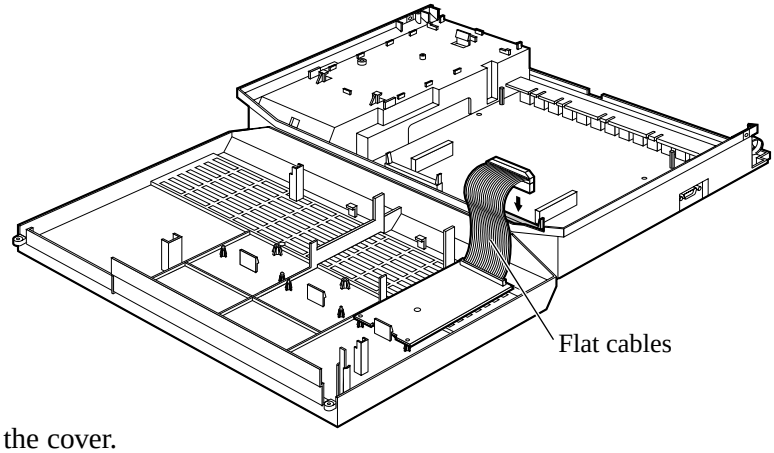
2. Open the bottom front cover.



3. Attach the OGM/FAX Detection card.



4. Insert the flat cables to the card connector.



5. Close the cover.

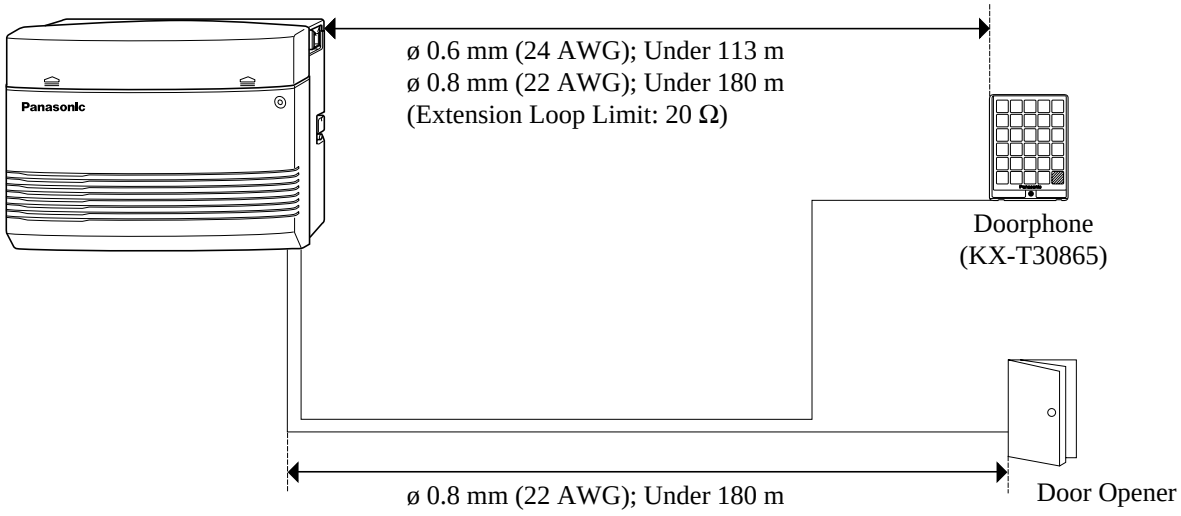
- **Required System Programming**
  See 'Required System Programming' in Section 3, Features "Direct Inward System Access (DISA)"
- **Feature References**
  Section 3, Features
  Direct Inward System Access (DISA)
  Outgoing Message (OGM)

2.16 Doorphone and Door Opener Connection

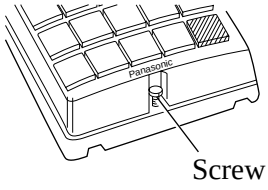
Four doorphones (KX-T30865) and 4 door openers (user-supplied) can be installed.

Maximum cable length

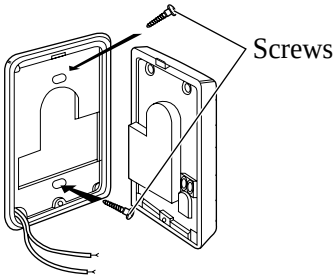
The maximum length of the doorphone and door opener line cord which connects the system is as follows.


Panasonic
ø 0.6 mm (24 AWG); Under 113 m
ø 0.8 mm (22 AWG); Under 180 m
(Extension Loop Limit: 20 Ω)
Doorphone
(KX-T30865)
ø 0.8 mm (22 AWG); Under 180 m
Door Opener

Installing the Doorphone



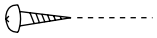
1. Loosen the screw to open the doorphone unit.



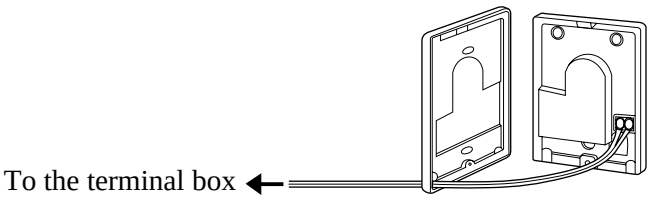
2. Attach the base cover to a wall using 2 screws.

Note Two kinds of screws are included. Please choose the appropriate one depending on your type of wall.

Type 1: When a doorphone plate has been fixed to the wall.


Type 2: When you wish to install the doorphone directly to the wall.

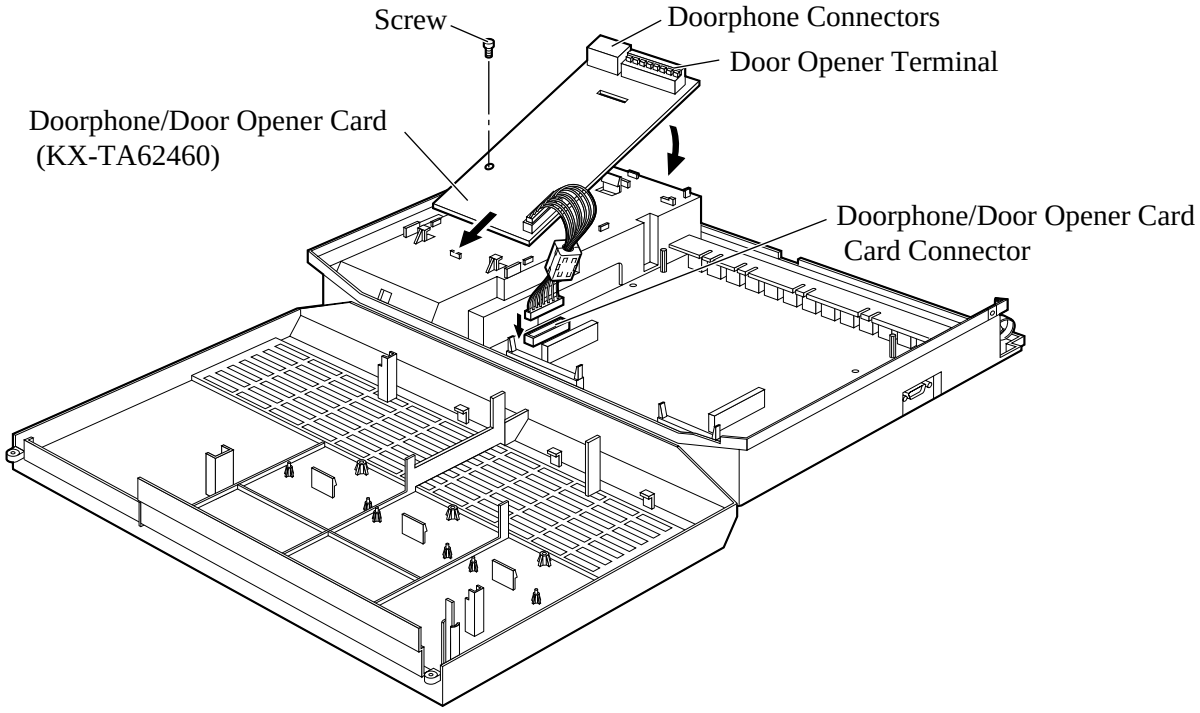
3. Connect the wires to the screws located in the front cover.



4. Put the doorphone together and re-install the screw.

Doorphone/Door Opener Installation

Attach the optional Doorphone/Door Opener Card to the main unit, connect the cord to the Doorphone/Door Opener Card Connector and secure the screw.



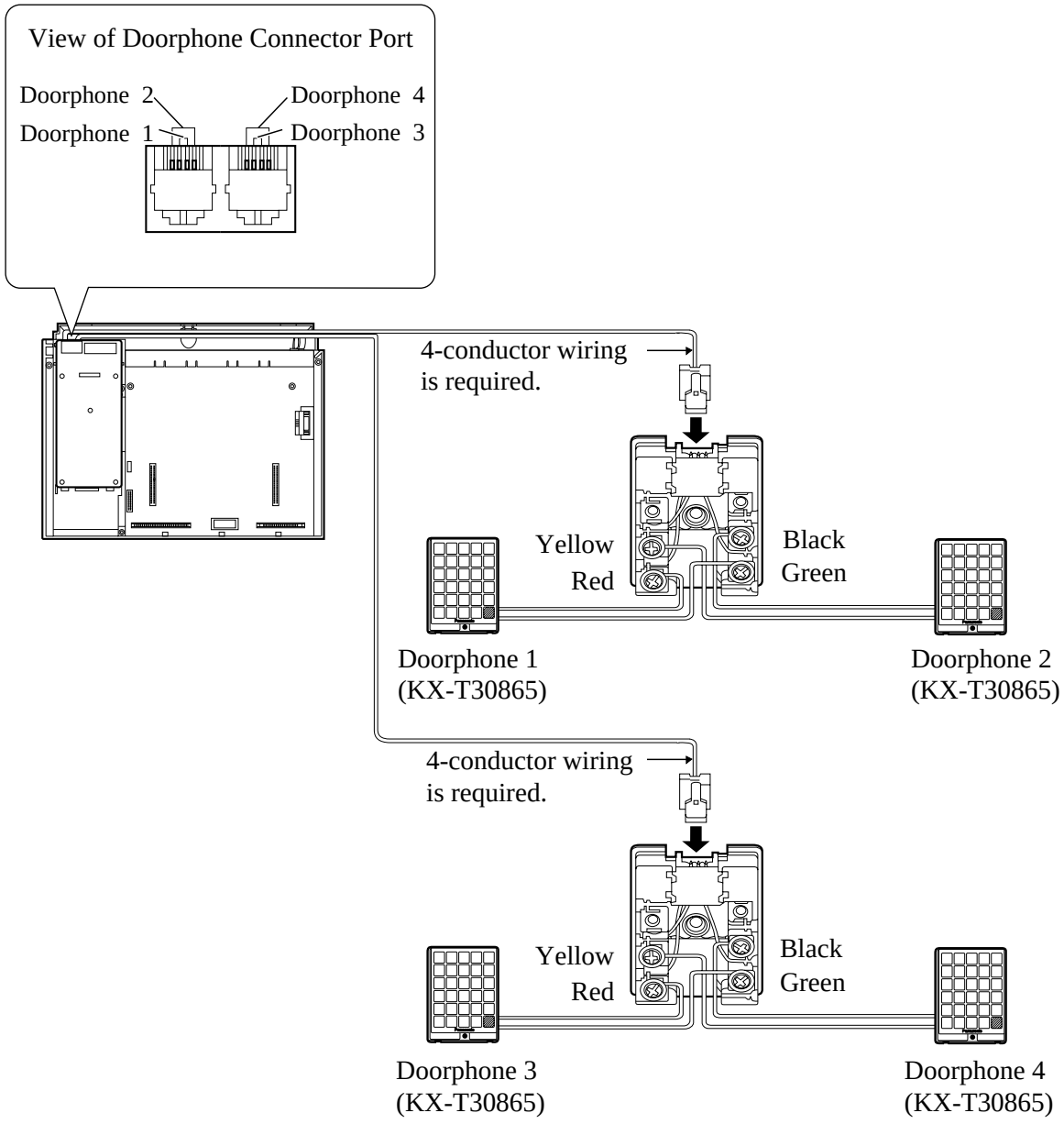
2.16 Doorphone and Door Opener Connection

Wiring of the Doorphone

1. Connect the Doorphone/Door Opener Card to the terminal boxes using 4-conductor modular connectors.

2. Connect the wires of doorphones 1 and 3 to the red and green screws on the terminal box.

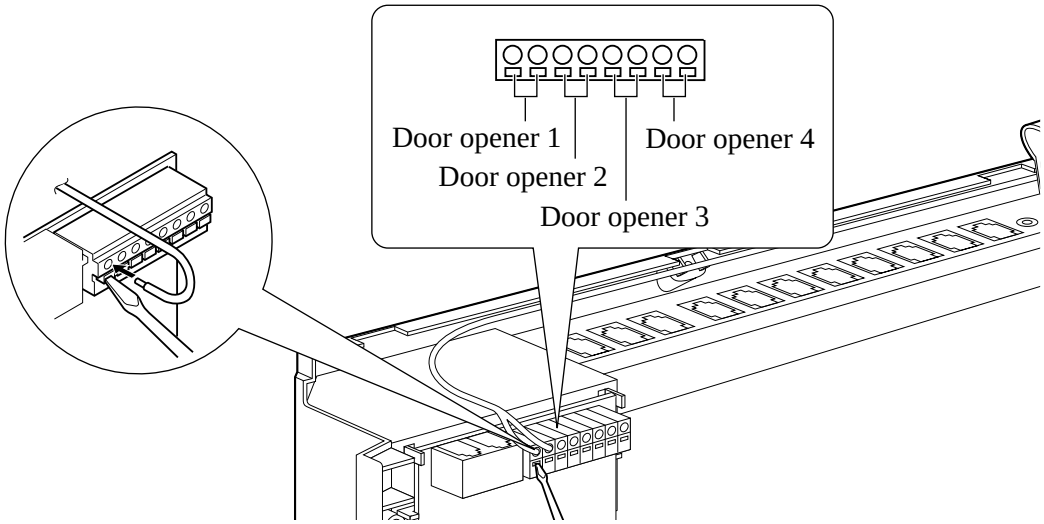
3. Connect the wires of doorphones 2 and 4 to the yellow and black screws on the terminal box.

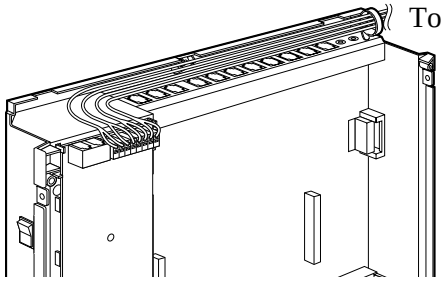


2.16 Doorphone and Door Opener Connection

Connecting Door Openers

1. While pressing the button below a hole with a screw driver, insert the wire from the door opener into the hole.

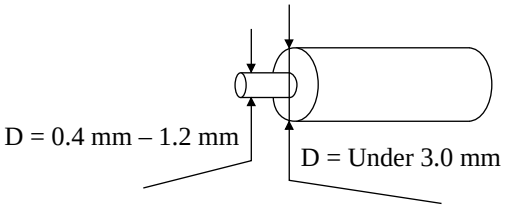




2. Wrap the strap around all of the cords. (☞ 2.20, Securing the Cords)

!

- We recommend using the wire (ø 0.4 mm – ø 1.2 mm) or the equivalent for wiring.
- The wire should be under 3.0 mm in diameter including the coating.
- Door Opener ports are at SELV.



☞

- **Required System Programming**
  Section 4 System Programming
  [700]–[702] Doorphone Ringing Assignment — Day/Night/Lunch
  [703]–[705] Door Opener Assignment — Day/Night/Lunch
- **Feature References**
  Section 3, Features
  Door Opener, Doorphone Call

2.17 Installing a 3-CO Line & 8 Ext Expansion Card (KX-TA62477) and 8 SLT Extn. Expansion Card (KX-TA62474)

3-CO Line and 8 Ext Expansion Card Installation (KX-TA62477)

To add 3 exchange lines (exchange lines 4 through 6) and 8 extensions (extension ports 09 through 16), use an optional 3-CO Line and 8 Ext Expansion Card (KX-TA62477).

8 SLT Extension Expansion Card Installation (KX-TA62474)

To add 8 extensions (extension ports 17 through 24), use an optional 8 SLT Extension Expansion Card (KX-TA62474).

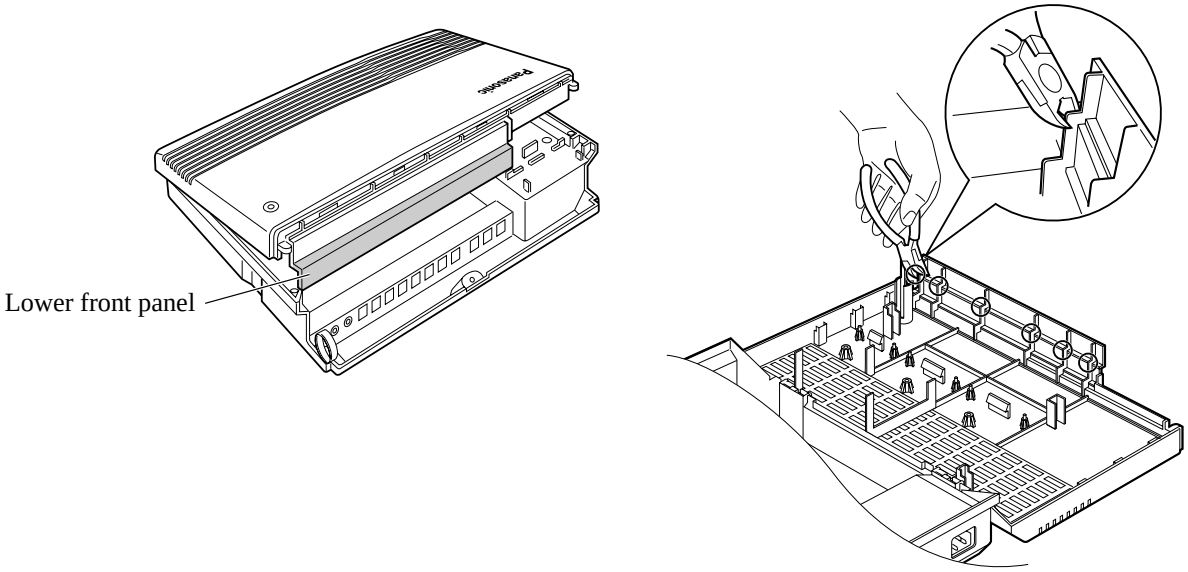
This card can be installed directly to the system or to the KX-TA62477.

- Only a single line telephone (SLT) can be connected to extension ports 17 through 24.

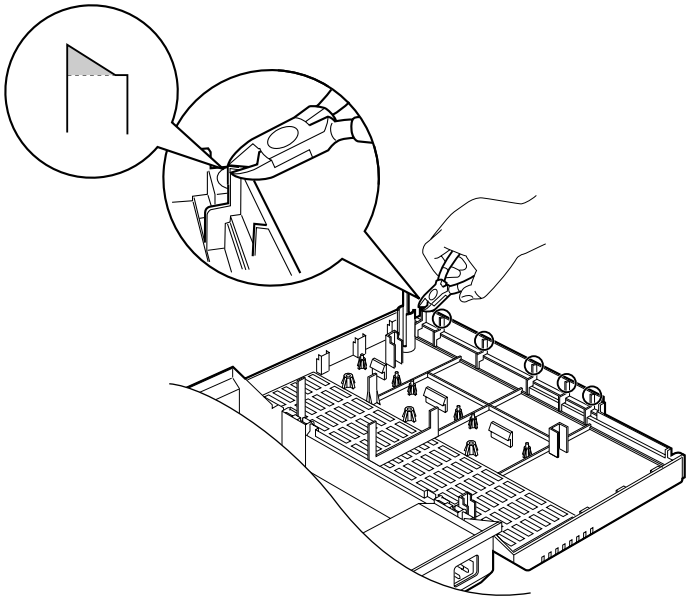
Installing the KX-TA62477

1. Loosen the screws and open the top and bottom front covers.

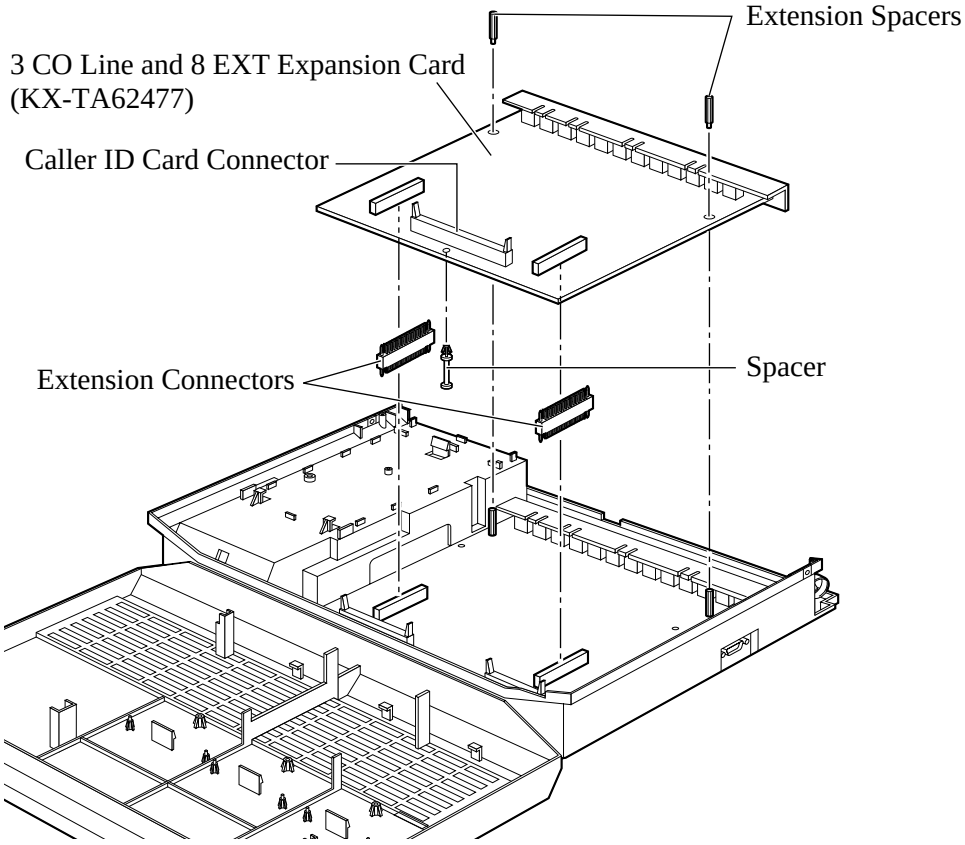
2. Remove the lower front panel with a suitable tool as shown below. Cut the 6 areas marked with a circle.



3. After cutting the areas, be sure to cut off any excess plastic in order to make the surface smooth.



4. First, insert the plastic spacer into the hole on the KX-TA62477. Attach the 2 extension connectors to the system, install the KX-TA62477 and secure the 2 extension spacers.



5. Insert the modular plugs of the telephone line cords (2-conductor wiring) into the ports (CO 4 through 6) on the card. (☞ 2.7, Exchange Line Connection)

6. Connect the line cords to the terminal board or the ports from the Local Exchange.

7. Insert the modular plugs of the telephone line cords (2 or 4-conductor wiring) into the ports (JACK 09 through 16). (☞ 2.8, Extension Connection)

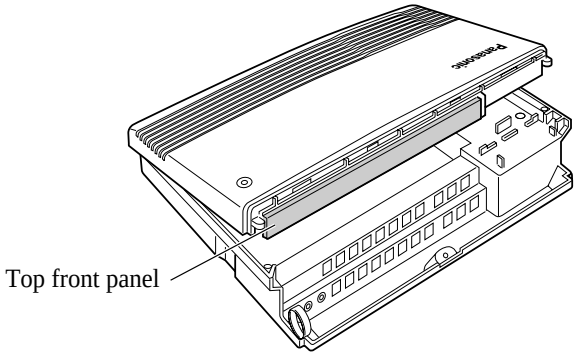
8. Wrap the strap around all of the cords. (☞ 2.19, Securing the Cords)

9. Close the covers and secure the screws.

Installing the KX-TA62474

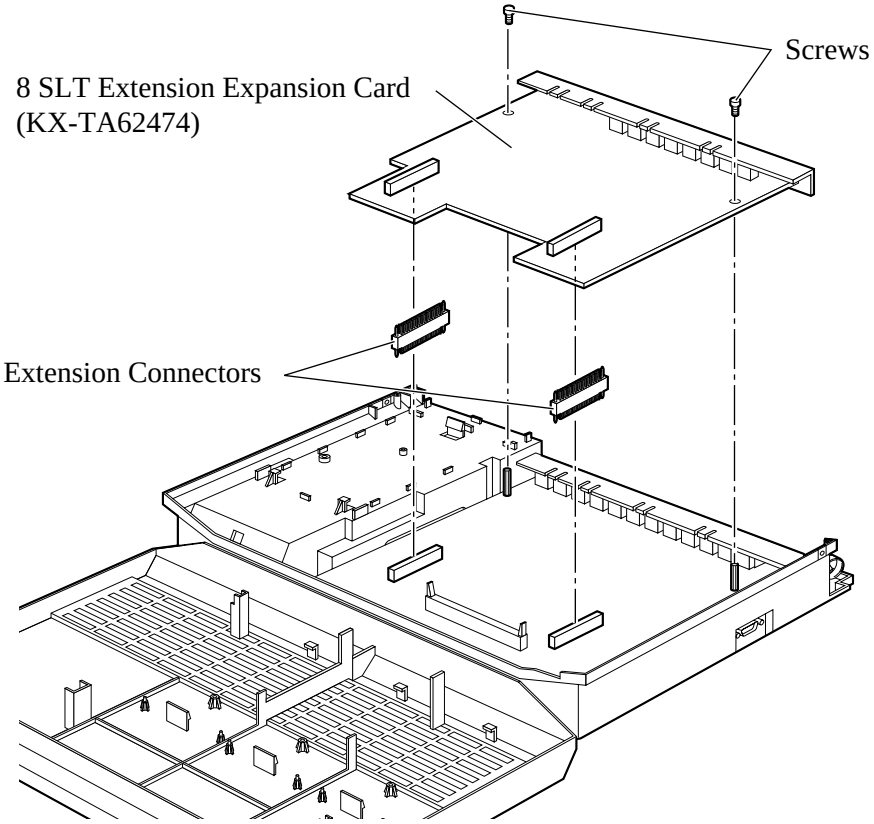
1. Loosen the screws and open the front and bottom front covers.

2. Remove the lower front panel in the same way as installing a KX-TA62477. If you install the KX-TA62474 to a KX-TA62477, remove the top front panel with pliers.



3. After cutting the areas, be sure to cut off any excess plastic in order to make the surface smooth. Please refer to installing the KX-TA62477.

4. Attach the 2 extension connectors to the system first, install the KX-TA62474 and secure the 2 screws.



5. Insert the modular plugs of the telephone line cords (2-conductor wiring) into the ports (JACK 17 through 24). (☞ 2.8, Extension Connection)

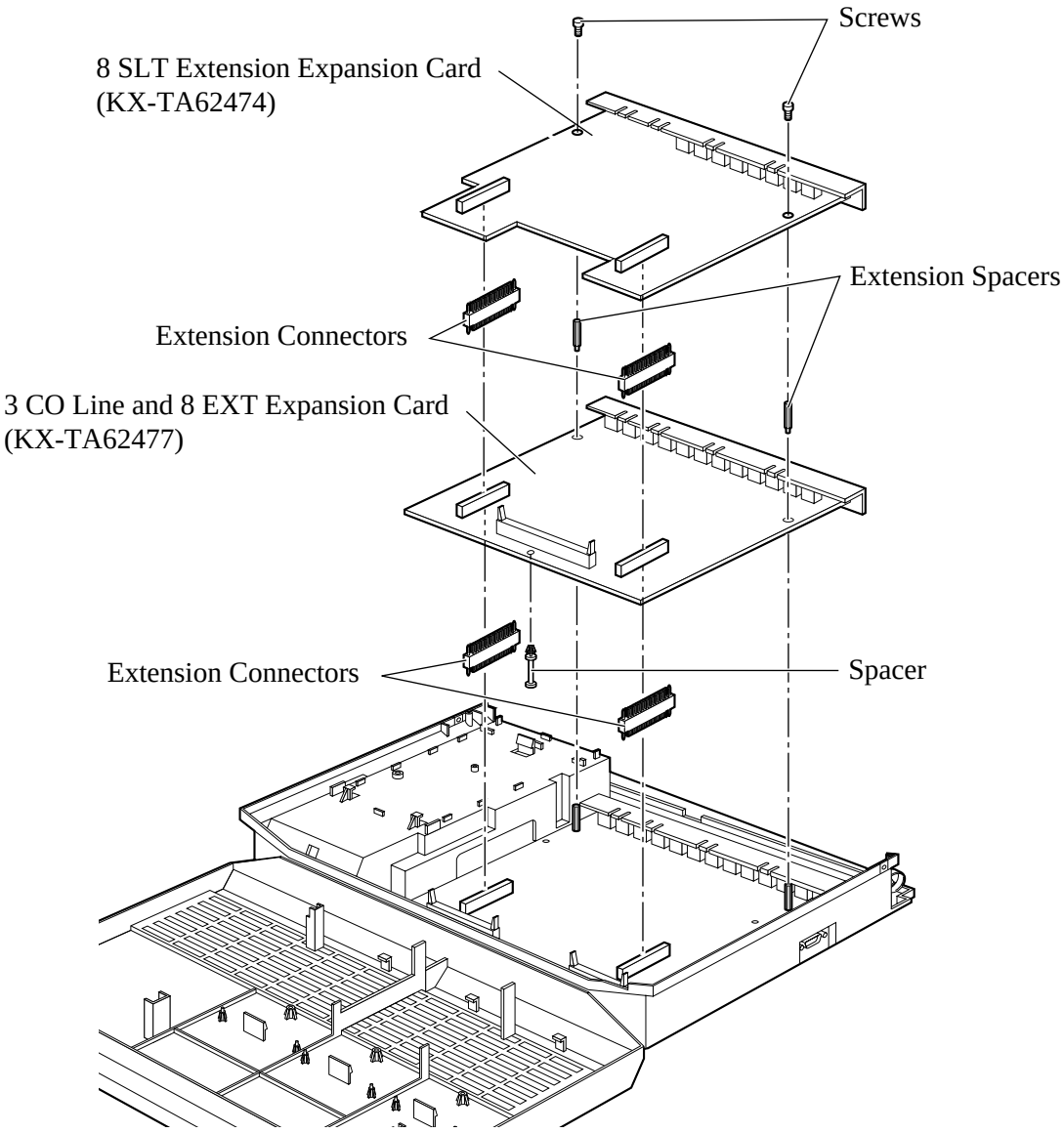
6. Wrap the strap around all of the cords. (☞ 2.19, Securing the Cords)

7. Close the covers and secure the screws.

2.17 Installing a 3-CO Line & 8 Ext Expansion Card (KX-TA62477) and 8 SLT Extn. Expansion Card (KX-TA62474)

Installing the KX-TA62477 and KX-TA62474

1. Install the KX-TA62477 first and then the KX-TA62474.



2.18 Auxiliary Connection for Power Failure Transfer

Power failure transfer connects a specific single line telephone (SLT) to selected exchange lines in the event of system power failure, as follows.

Exchange line 1 – extension (T, R) port 01

Exchange line 4 – extension (T, R) port 09

Connection of exchange lines 1 and 4, and the respective extensions require no auxiliary connection.

- In the event of a power failure, system memory is protected by a factory-provided lithium battery. There is no memory loss except the Camp-on, Saved Number Redial, Last Number Redial, Call Park and Message Waiting memories.
- The system automatically changes the current connection to the above connection when the power supply stops.
- Proprietary telephones cannot be used during a power failure. Therefore, we recommend connecting SLTs in parallel with proprietary telephones connected to extension ports 01 and 09.

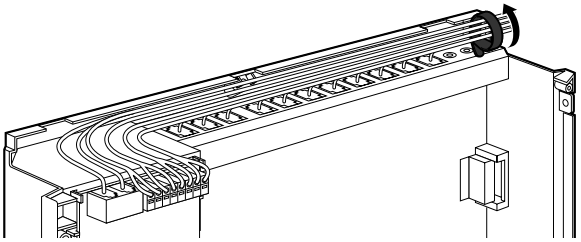
- **Feature References**

  Section 3, Features

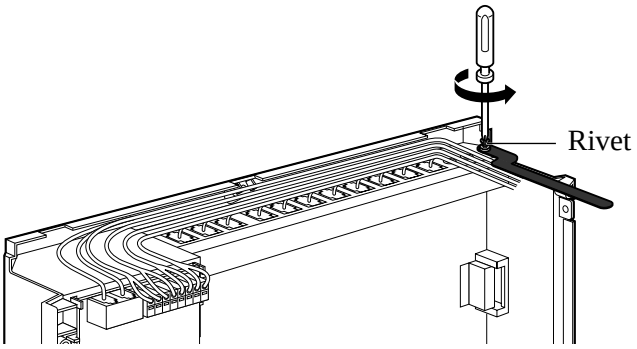
  Power Failure Transfer, Parallelled Telephone Connection

2.19 Securing the Cords

1. Wrap the strap around all of the cords.



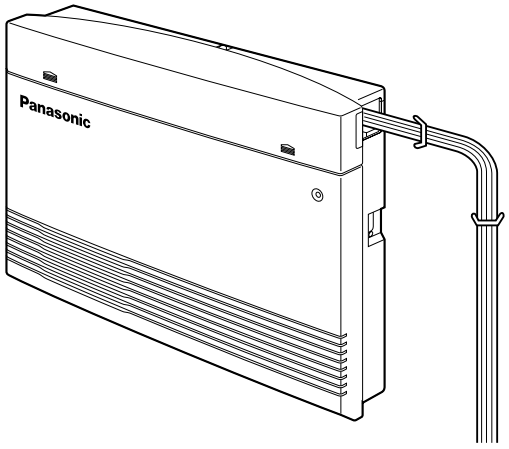
- To remove the rivet, use a screw driver as shown below.



2.20 Closing the Front Cover

1. Replace the covers and tighten the screws.

2. Tie together all of the connected cords and attach them to the wall so that the cords cannot be pulled out of the system.



2.21 Starting the System for the First Time

1. Set the Power Switch to the “OFF” position.

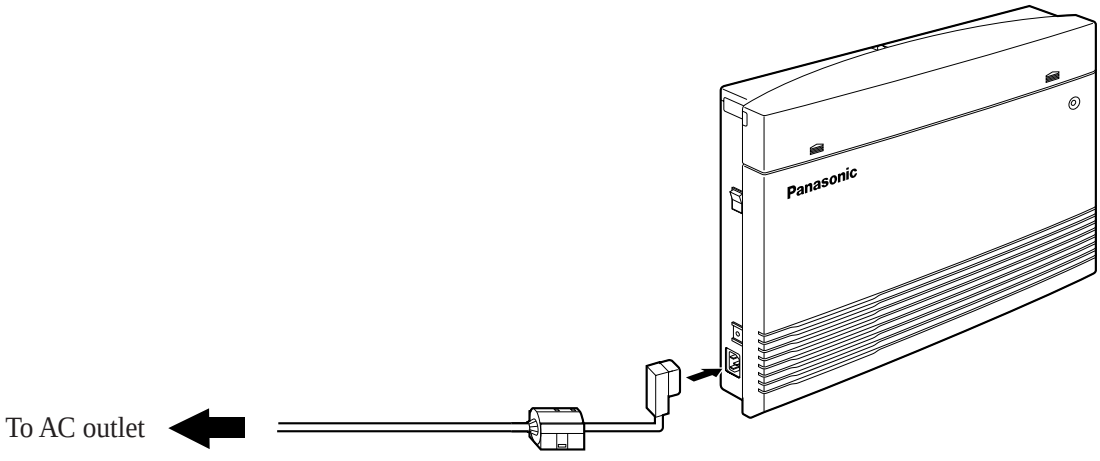
2. Plug the AC power cord into the system and an AC outlet.

3. Turn the Power Switch on.
(The power indicator will light.)

4. Perform the following operation with a proprietary telephone connected to JACK 01.
a) Set the MEMORY switch to “PROGRAM” on the back of the telephone.
b) Press ✳ #.
c) Enter 1234.
d) Enter 999.
e) Press the NEXT (SP-PHONE) button.
f) Press the SELECT (AUTO ANSWER/MUTE) button until “All Para” is displayed.
g) Press the STORE (AUTO DIAL/STORE) button.
h) Press the END (HOLD) button.
i) Set the MEMORY switch to “SET” on the back of the telephone.

The system will be initialised with the default values. If the system does not work properly, please see 2.23, “System Data Clear”.

CAUTION
- The system will continue to be powered even if the Power Switch is turned “OFF”.
- The power supply cord is used as the main disconnect device. Ensure that the outlet is located/installed near the equipment and is easily accessible.



2.22 System Restart

After starting the system, if the system does not operate properly, restart the system.
Before restarting the system, try the system feature again to confirm whether there definitely is a problem or not.
System Restart causes the following.

- Camp-on is cleared.
- Calls on Hold are terminated.
- Calls on Exclusive Hold are terminated.
- Calls in progress are terminated.
- Call Park is cleared.
- Message Waiting is cleared.
- Last Number Redial is cleared.
- Saved Number Redial is cleared.

Other data is not cleared by System Restart.

1. Turn the Power Switch “OFF” and then “ON”.

- If the system still does not operate properly, please see 2.23, “System Data Clear”.

2.23 System Data Clear

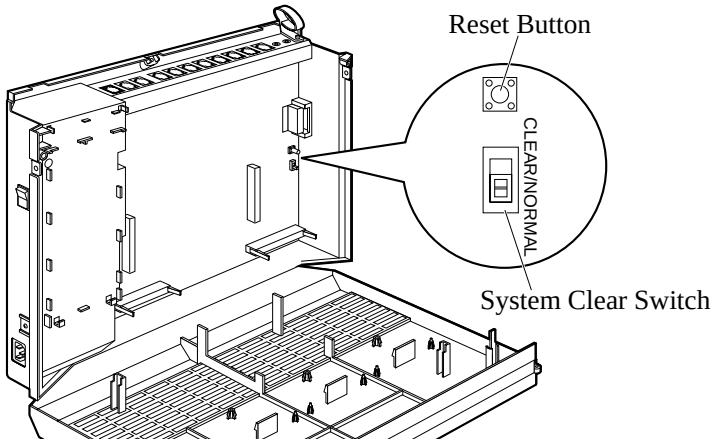
When the system does not operate properly after restarting, you can clear the programming data stored in the system. The system will restart with the default settings.

First, try system program [999] "System Data Clear" by following step 4 in 2.21, "Starting the System for the First Time". If the system still does not operate properly, please follow the procedure below.

1. Slide the System Clear Switch to the "CLEAR" position.

2. Press the Reset Button.

3. Return the System Clear Switch to the "NORMAL" position before the power indicator stops flashing.
(The power indicator will flash for about 10 seconds.)



CAUTION • Before touching the System Clear Switch and Reset Button, put on a grounding strap.

! • After pressing the Reset Button, return the System Clear Switch to the "NORMAL" position in step 3 before the power indicator stops flashing. Otherwise, the system will not clear.

☞ • **Feature Reference**
Section 3, Features
System Data Default Set

Section 3
Features

Absent Message Capability

Allows an extension user to set a message which will be displayed at the calling extension to show the reason for the called extension's absence. One of 6 messages can be programmed as desired, which are available for any telephone (single line telephone or proprietary telephone). Setting or cancelling a message can be done by individual extension users but only callers using a proprietary telephone with a LCD can see the message.

- The 6 messages are shown below. "%" means a parameter to be entered when assigning a message at an extension.
  (1) Will Return Soon
  (2) Gone Home
  (3) At Ext %%% (extension number)
  (4) Back at %% : %% AM (or PM) (hour : minute)
  (5) Out Until %%/%% (day / month)
  (6) In a Meeting
- An extension user can only select one message at a time. The selected message is displayed every time the user goes off-hook.

- **Operating Instructions Reference**
  1.6 Before Leaving Your Desk, "Showing Your Message on the Calling Party's Display (Absent Message Capability)"

Account Code Entry

An account code is used to identify incoming and outgoing outside calls for accounting and billing purposes. The account code is appended to the SMDR call record. For incoming outside calls, an account code is optional. For outgoing outside calls, there are 4 account input modes programmable in program [605], Option, Forced, Verify–All and Verify–Toll.

Option: A 4-digit code may be entered during a conversation or within 30 seconds after a conversation when a record is needed.

Forced: A 4-digit code must be entered within 5 seconds after an exchange line is seized. The code can be any number.

Verify–All: Enables to make an outside call if the code entered within 5 seconds after an extension user seizes an exchange line is the same as one of the account codes programmed in [310].

Verify–Toll: Enables to override call barring temporarily by entering one of the account codes programmed in [310] within 5 seconds after an exchange line is seized. Calls with COS numbers 3 through 5 will be treated as calls with COS number 2. Calls with COS numbers 1 and 2 will not be affected.

- **Required System Programming**
  [310] Account Codes
  [601]-[603] Call Barring – Class of Service Assignment —Day/Night/Lunch
  [605] Account Code Entry Mode
  [805] SMDR Account Code Selection
- **Related Feature References**
  Station Message Detail Recording (SMDR),
  Call Barring Override by Account Codes
- **Operating Instructions Reference**
  1.7 Useful Features, “Calling with Account Codes (Account Code Entry)”

Alternate Calling – Ring/Voice

This system offers a proprietary telephone user 2 types of intercom calling, Voice Call mode and Tone (ring) Call mode. “Voice Call” informs the called party of an incoming call with the calling party’s voice, while “Tone Call” uses a ring tone. A proprietary telephone user can select “Voice Call” or “Tone Call” in the Proprietary Telephone Settings. If the user selects “Voice Call”, the calling party can talk to the user immediately after the confirmation tone. The calling party can switch the pre-set mode at the called extension, from “Voice Call” to “Tone Call” or vice versa, by pressing “✳” after dialling the extension number.

- A rotary telephone user cannot change the pre-set mode at the called extension.

- **Operating Instructions References**
  1.2 Proprietary Telephone Settings, “Customising Your Telephone Functions”, Intercom Alert Assignment
  1.7 Useful Features, “Alternate Calling – Ring/Voice”

Automatic Callback Busy (Camp-On)

When the selected exchange line or dialled extension is busy, the system will automatically notify an extension user with a callback ringing when the line becomes available. When the user answers the callback ringing:

For an extension: The called extension starts ringing without dialling.

For an exchange line: The line is seized.

- **Operating Instructions Reference**
  1.3 Making Calls, "Making Your Telephone Ring Back Automatically When a Line Becomes Free (Automatic Callback Busy – Camp-On)"

Automatic Exchange Line Access Number

An Automatic Line Access number (0 or 9) can be programmed. When an extension user dials an Automatic Line Access number before a telephone number, an available exchange line from the assigned lines in program [419] is seized automatically. If "0" is selected in program [121], the operator call will be "9" automatically. If "9" is selected in program [121], the operator call will be "0" automatically.

- **Related Feature References**
  Operator Call, Outside Calling
- **Required System Programming**
  [121] Automatic Exchange Line Access Number Selection
  [419] Automatic Designated Exchange Line Access

Automatic Route Selection (ARS)

The system automatically selects the least expensive route available at the time a long distance call is made on the exchange line enabled for ARS feature. It is not necessary to dial the access code of the least expensive carrier.

1. Normal Use

To make a call via the least expensive carrier, the dialled number is modified. The following are modification examples.

Example 1 (Long distance call using Route 1):

[350] "ARS Selection": Enable
[351] "Route 1 Selection Codes (Leading Digit)": 0
[355] "Route 1 Exception Codes": 07
[360] "ARS Modification – Removed Digits": 0 (No deletion)
[361] "ARS Modification – Added Number": 131(Code of least expensive carrier for a long distance call)
[381] "Route 1 Authorisation Code": 0123456789
[385] "Route 1 Itemised Bill": Enable
[389] "Itemised Bill Code Assignment": 201

<Dialled number>		<Modified number>
01633 877 467	→	131 0123456789 201 01633 877 467

Example 2 (International call using Route 2):

[350] "ARS Selection": Enable
[352] "Route 2 Selection Codes (Leading Digit)": 00
[360] "ARS Modification – Removed Digits": 0
[361] "ARS Modification – Added Number": 1620 (Code of least expensive carrier for an international call)
[386] "Route 2 Itemised Bill": Enable
[389] "Itemised Bill Code Assignment": 201

<Dialled number>		<Modified number>
00 44 1344 853941	→	1620 201 00 44 1344 853941

Example 3 (Long distance call via the first carrier):

[350] "ARS Selection": Enable
[359] "1st Carrier Selection Code": 121

<Dialled number>		<Modified number>
121 01633 877 467	→	01633 877 467

2. Special Use

If an extension user always uses the Automatic Line Access number (9 or 0) when making an outside call and wants to seize the specified trunk group as below automatically, refer to the following program assignment.

<Example>

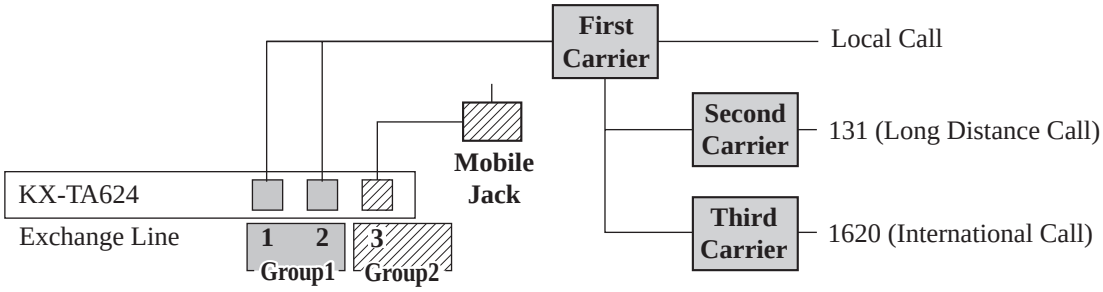
- Trunk group which connects with the least expensive carrier for a long distance call (Long distance calls start with "0". Carrier code = 131)
- Trunk group which connects with the least expensive carrier for an international call (International calls start with "00". Carrier code = 1620)
- Trunk group connected to a mobile telephone (No modification of the dialled number is necessary.)

To specify how to modify the dialled number, and specify a trunk group for each route

Program Address / Route No.	[351] | [354]	[355] | [358]	[360]	[361]	[364]
Route 1	0	07	0 digit	131	trunk group number 1
Route 2	00		0 digits	1620	trunk group number 1
Route 3	079		0 digit		trunk group number 2

To specify exchange lines in the trunk groups

Program Address / Exchange Line No.	[404] Trunk Group Assignment	[350]	[419] Automatic Designated Exchange Line Access
1	trunk group number 1	Enable	Enable
2	trunk group number 1	Enable	Enable
3	trunk group number 2	Enable	Disable



Example 5 [Long distance call using Route 1 (trunk group number 1)]:

<Dialled number>		<Modified number>
9 01633 877 467	→	131 01633 877 467

Example 6 [International call using Route 2 (trunk group number 1)]:

<Dialled number>		<Modified number>
9 00 44 1344 853941	→	1620 201 00 44 1344 853941

Example 7 [Mobile telephone call using Route 3 (trunk group number 2)]:

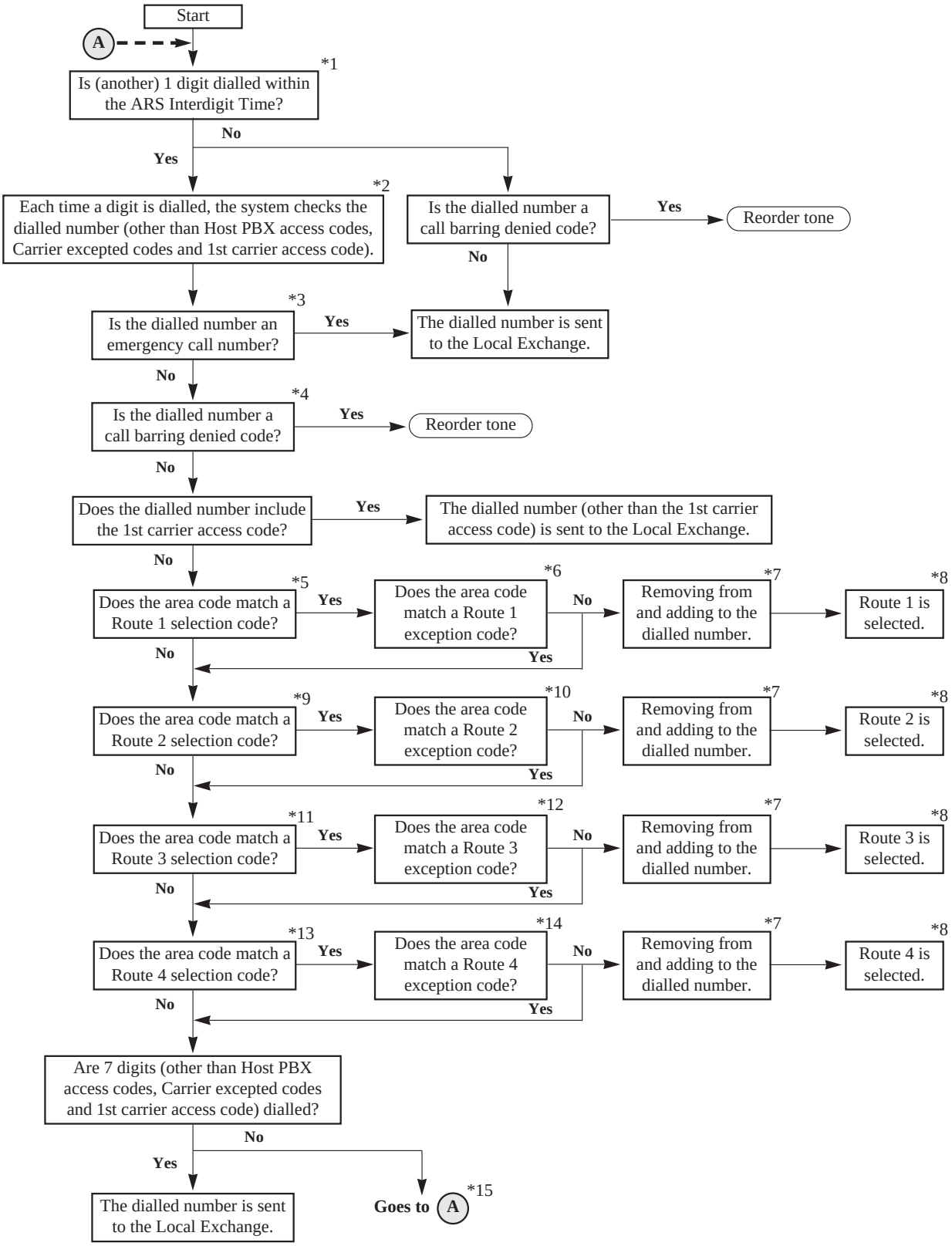
<Dialled number>		<Modified number>
9 07979 123456	→	07979 123456

- System Programming is required to execute this feature.
- If an extension user makes an outside call using the Automatic Line Access number (9 or 0) and the dialled number does not apply to any numbers assigned in programs [351]–[354], an exchange line which has selected "Enable" in program [419] "Automatic Designated Exchange Line Access" is automatically seized.

- **Required System Programming**

  [350] ARS Selection
  [351]-[354] Routes 1 through 4 Selection Codes (Leading Digits)
  [355]-[358] Routes 1 through 4 Exception Codes
  [359] 1st Carrier Selection Code (BT Line Access Code)
  [360] ARS Modification – Removed Digits
  [361] ARS Modification – Added Number
  [362] ARS Dial Tone Pattern Selection
  [363] ARS Interdigit Time
  [364] ARS Trunk Group
  [381]-[384] Routes 1 through 4 Authorisation Codes
  [385]-[388] Routes 1 through 4 Itemised Bill
  [389] Itemised Bill Code Assignment

Flow chart of possible cases and results for ARS calls



*1: The ARS Interdigit timer is assigned in program [363] “ARS Interdigit Time”.

*2: The codes are assigned in the following programs.
Host PBX access codes: [403] “Host PBX Access Codes”
Carrier excepted codes: [300] “Carrier Excepted Code Assignment”
1st carrier access code: [359] “1st Carrier Selection Code”.

*3: Emergency call numbers are assigned in program [309] “Emergency Dial Number Set”.

*4: Call Barring denied codes are assigned in program [302]-[305] “Call Barring – Classes 2 through 5 Denied Codes”.

*5: Route 1 selection codes are assigned in program [351] “Route 1 Selection Codes (Leading Digits)”.

*6: Route 1 exception codes are assigned in program [355] “Route 1 Exception Codes”.

*7: Removing digits are assigned in program [360] “ARS Modification – Removed Digits” and added numbers are in [361] “ARS Modification – Added Number”

*8: The trunk group(s) assigned in program [364] is (are) automatically seized when making a call using the Automatic Exchange Line Access number (0 or 9).

*9: Route 2 selection codes are assigned in program [352] “Route 2 Selection Codes (Leading Digits)”.

*10: Route 2 exception codes are assigned in program [356] “Route 2 Exception Codes”.

*11: Route 3 selection codes are assigned in program [353] “Route 3 Selection Codes (Leading Digits)”.

*12: Route 3 exception codes are assigned in program [357] “Route 3 Exception Codes”.

*13: Route 4 selection codes are assigned in program [354] “Route 4 Selection Codes (Leading Digits)”.

*14: Route 4 exception codes are assigned in program [358] “Route 4 Exception Codes”.

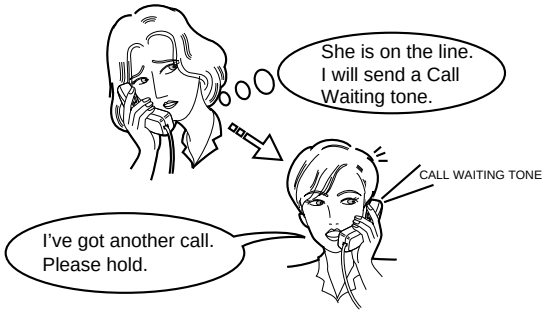
*15: The system repeats checking until 7 digits are dialled.

Busy Extension Signalling

When an extension user calls a busy extension, the busy extension will hear a Call Waiting tone to know that a call is waiting.

- This feature is only available if the called extension has set the Call Waiting feature. If the Call Waiting feature is activated, the caller will hear a ringback tone. If not, the caller will hear a reorder tone.

- **Related Feature Reference**
  Call Waiting
- **Operating Instructions Reference**
  1.3 Making Calls, “Sending a Call Waiting Tone to a Busy Extension (Busy Extension Signalling)”



Call Barring

Call Barring is a system programmable feature that can prohibit certain extension users from making unauthorised toll calls.

Every extension is programmed to belong to one of 5 classes of service (COS). Each COS is programmed to have a call barring class for day mode, night mode and lunch mode.

There are 5 call barring COS numbers available. Call barring COS number 1 is the highest class and the COS number 5 is the lowest. That is, COS number 1 allows all toll calls. COS numbers 2 through 5 are used to restrict calls by combining pre-programmed deny and exception codes shown in the table on the next page.

Denied Codes

An outgoing outside call made by an extension with a call barring COS number between 2 and 5 is first checked against the assigned denied codes in program [302]-[305].

If the first digits of the dialled number (not including the line access code) are not found in the class, the call can be made. Each class can store up to 20 denied codes, each consisting of 11 digits.

Exception Codes

These codes are used to override a programmed denied code. A call denied by the denied codes is checked against the selected exception codes assigned in program [306]. If a match is found, the call can be made.

Up to 80 exception codes, each consisting of 11 digits, can be stored. The available number of codes depends on the COS number.

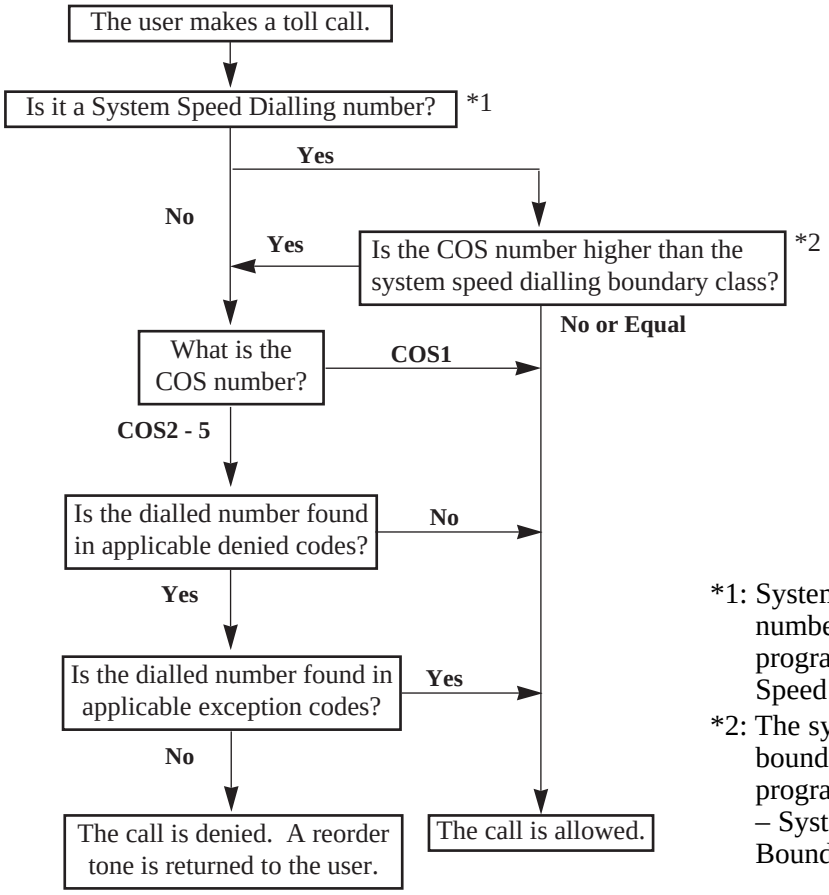
- Emergency numbers, such as the police or fire station, should be stored in program [309] “Emergency Dial Number Set” so that they are exempt from call barring.
- If a stored Host PBX access code in program [403] “Host PBX Access Codes” or a stored carrier code in program [300] “Carrier Excepted Code Assignment” is found in the dialled number, the subsequent telephone numbers will be checked for call barring.
- The interdigit timer assigned in program [208] “Interdigit Time” applies until the call barring check is completed. When the timer expires, an outside outgoing call will be disconnected while dialling, if “Enable” was selected in program [211] “No Dial Disconnection”.
- The call barring class for a locked extension can be assigned in program [312] “Call Barring – Extension Lock Boundary Class” so that even a locked extension can make a local call, etc.
- It is programmable whether the “✳” or “#” the user dials is to be checked or not on the Call Barring code in program [125] “Call Barring Check for ✳ and #”. This is useful to prevent unauthorised calls which could be possible through certain Local Exchange systems.

- **Required System Programming**
  - [301] Call Barring – System Speed Dialling Boundary Class
  - [302]-[305] Call Barring – Classes 2 through 5 Denied Codes
  - [306] Call Barring – Exception Codes
  - [601]-[603] Call Barring – Class of Service Assignment – Day/Night/Lunch
- **Related Feature References**
  - Emergency Call
  - Call Barring – Extension Lock Boundary Class
  - Call Barring for System Speed Dialling
  - Call Barring Override by Account Codes

Combination of denied codes and exception codes

COS No.	Denied Calls	Excepted Calls
1	No restriction.	No restriction.
2	20 denied codes programmed in [302].	80 exception codes (code numbers 01-80) programmed in [306].
3	20 denied codes programmed in [302] plus 20 denied codes programmed in [303].	60 exception codes (code numbers 01-60) programmed in [306].
4	20 denied codes programmed in [302] plus 20 denied codes programmed in [303] plus 20 denied codes programmed in [304].	40 exception codes (code numbers 01-40) programmed in [306].
5	20 denied codes programmed in [302] plus 20 denied codes programmed in [303] plus 20 denied codes programmed in [304] plus 20 denied codes programmed in [305].	20 exception codes (code numbers 01-20) programmed in [306].

Flow chart of Call Barring


The user makes a toll call.
Is it a System Speed Dialling number?
*1
Yes
No
Yes
Is the COS number higher than the system speed dialling boundary class?
*2
No or Equal
What is the COS number?
COS1
COS2 - 5
Is the dialled number found in applicable denied codes?
No
Yes
Is the dialled number found in applicable exception codes?
Yes
No
The call is denied. A reorder tone is returned to the user.
The call is allowed.

*1: System Speed Dialling numbers are assigned in program [001] “System Speed Dialling Entry”.

*2: The system speed dialling boundary class is assigned in program [301] “Call Barring – System Speed Dialling Boundary Class”.

Call Barring — Extension Lock Boundary Class

Allows assigning a call barring class for extensions where the Electronic Extension Lockout or Remote Extension Lock feature has been set.
An extension user usually cannot make an outside call at a locked extension, however if a call barring class is assigned in program [312], the user can make an outside call at the locked extension.

- The higher call barring class number will take precedence.
  For example, if call barring COS number 3 is assigned to an extension and the extension lock boundary class is 4, the extension user is allowed to make a call with call barring COS number 4.

- **Required System Program Address**
  [312] Call Barring – Extension Lock Boundary Class
- **Related Feature References**
  Extension Lock, Call Barring

Call Barring for System Speed Dialling

Calls originated by System Speed Dialling are restricted depending on the combination of the System Speed Dialling Boundary Class assigned in program [301] and the class of service (COS) assigned to each extension as follows.

COS No. \ System Speed Dialling Boundary Class	1	2	3	4	5
1	A	A	A	A	A
2	C	A	A	A	A
3	C	C	A	A	A
4	C	C	C	A	A
5	C	C	C	C	A

A: allowed **C:** checked

<Example>
—If the boundary is set to COS number 2,
The system will allow system speed dialling for COS numbers 1 and 2, but check COS numbers 3, 4 and 5 according to call barring.

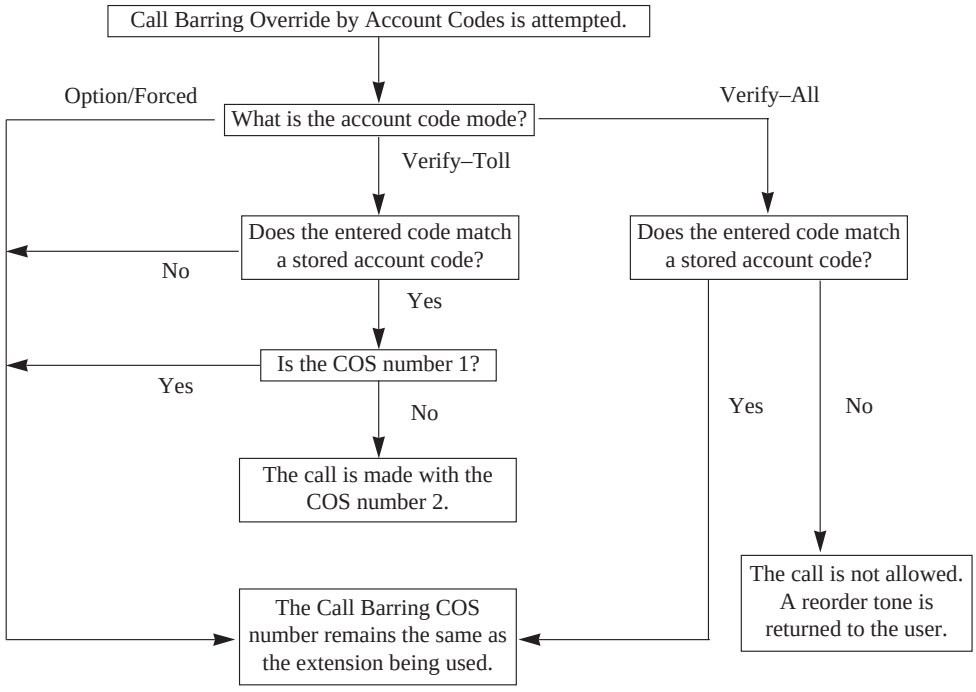
- **Required System Programming**
  [301] Call Barring – System Speed Dialling Boundary Class
- **Related Feature Reference**
  Call Barring

Call Barring Override by Account Codes

Allows an extension user to override call barring temporarily to make a toll call from a toll-restricted extension. The user can carry out this feature by entering one of the account codes programmed in [310] "Account Codes" before dialling the telephone number. The user can make a toll call with the COS number 2.

- The account code "Verify-toll (call barring)" mode at an extension permits users to override their call barrings.
- This feature can be used on extensions assigned to call barring COS numbers 3 through 5. The COS numbers 1 and 2 will not be changed.
- If the user does not enter an account code or enters an invalid one, a regular call barring check is done.
- When a user makes a call using this feature, it will appear on the SMDR printout with either the entered 4-digit account code or the 2-digit index of the entered account code. This selection is set in program [805].
- Users can also override call barring of another extension by using the Walking COS feature.

Flow chart of Call Barring Override


Call Barring Override by Account Codes is attempted.
What is the account code mode?
Option/Forced
Verify–All
Verify–Toll
Does the entered code match a stored account code?
No
Yes
Is the COS number 1?
Yes
No
The call is made with the COS number 2.
Does the entered code match a stored account code?
Yes
No
The call is not allowed. A reorder tone is returned to the user.
The Call Barring COS number remains the same as the extension being used.

- **Required System Programming**
  [310] Account Codes
  [605] Account Code Entry Mode
  [805] SMDR Account Codes Selection
- **Related Feature References**
  Account Code Entry, Call Barring, Station Message Detail Recording (SMDR), Walking COS

Call Forwarding

Allows an extension user to transfer incoming calls automatically to another extension or to an external destination. The following types are available.

All Calls:	All incoming calls are forwarded to another extension.
Busy or No Answer:	All incoming calls are forwarded to another extension when the extension user does not answer within the programmed time in [202] or when the extension is busy.
To an Exchange Line:	Allows an extension user enabled in program [607] to forward all incoming intercom calls to an external party.
Follow Me:	Allows an extension user to set the Call Forwarding – All Calls feature from another extension.

- Extensions which have already been assigned as a forwarded destination cannot set the Call Forwarding feature.
- If the Do Not Disturb (DND) feature has already been set, setting the Call Forwarding feature will cancel DND.

- When using the call forward to an exchange line feature the quality of service may be adversely affected by the attenuation across the public telephone network.

- **Required System Programming**
  [202] Call Forwarding Start Time
  [607] Call Forwarding to an Exchange Line
- **Related Feature Reference**
  Limited Call Duration
- **Operating Instructions References**
  1.2 Proprietary Telephone Settings, “Customising the Buttons on Your Telephone”, FWD/DND (Forward/Do Not Disturb) Button
  1.6 Before Leaving Your Desk, “Forwarding a Call (Call Forwarding)”

Calling Party Control (CPC) Signal Detection

The Calling Party Control (CPC) signal is a disconnect signal sent from the Local Exchange for an outside call. The CPC signal detection is activated by programs [420] and [421]. Program [420] is for incoming outside calls, and [421] is for outgoing outside calls.

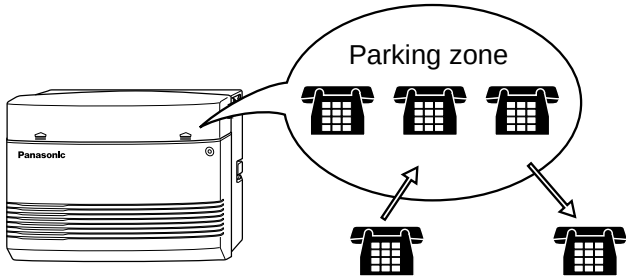
- **Required System Programming**
  [420] Calling Party Control (CPC) Signal
  [421] CPC Detection for Outgoing Calls

Call Park

Allows an extension user to place a held call into a system parking area. Any extension user can retrieve the parked call to perform other operations. Up to 10 calls can be parked at the same time.

- If a parked call is not retrieved within the assigned time in program [200], a ring tone or an alarm tone will be heard.
- If a parked call is not retrieved within 30 minutes, it will be automatically disconnected.
- This feature is useful when an extension user wants to hold more than one intercom call with a proprietary telephone, or more than one intercom call or outside call with a single line telephone.
- During a 5-party conference, this feature cannot be performed.

- **Required System Programming**
  [200] Hold Recall Time
- **Related Feature Reference**
  Conference (5-party)
- **Operating Instructions Reference**
  1.5 During Conversation, “Placing a Call in System Parking Area (Call Park)”



Call Pickup

<Directed Call Pickup>

Allows an extension user to answer a call ringing at any other extension.

<Group Call Pickup>

Allows an extension user to answer a call ringing at another extension, if the call is ringing within the user's extension group assigned in program [600]. If "Enable" is selected for an extension group in [127], persons in the group can pickup calls just by going off-hook, even though their extension is not ringing.

<Call Pickup Deny>

Allows an extension user to prevent other extensions from picking up a call ringing at the user's extension with the Call Pickup feature.

<Call Retrieving from a TAM (Telephone Answering Machine)>

Allows an extension user to answer an incoming call received by a TAM extension assigned in program [611].

- The user can pick up an incoming outside, intercom or doorphone call with the Directed Call Pickup or Group Call Pickup feature.
- A confirmation tone is sent to the user when the call is picked up with the Directed Call Pickup or Group Call Pickup feature. The tone can be disabled in program [117].
- If a ringing extension sets the Call Pickup Deny feature, an extension user will hear a reorder tone when the user tries to pick up the call.

- **Required System Programming**
  - [117] Call Pickup Tone
  - [127] Pickup Group Set
  - [600] Extension Group Assignment
  - [611] TAM (Telephone Answering Machine) Extension
- **Operating Instructions Reference**
  - 1.4 Receiving Calls, "Picking up a Call Ringing at Another Extension (Call Pickup)"

Call Splitting

Allows an extension user to talk to 2 different parties. If a call is received while the user is already on the line, the user can place the current call on hold and have a conversation with the other party.

- This feature is not possible for a doorphone call, page or 5-party conference.

- **Related Feature References**
  - Conference (5-party), Doorphone Call, Paging
- **Operating Instructions Reference**
  - 1.5 During Conversation, "Call Splitting"

Call Transfer – to Exchange Line

Allows an extension user enabled in program [606] to transfer a received intercom call to an external party.

- A single line telephone user cannot transfer a received call to an external party.
- To join the conversation again after transferring the call, press the corresponding line key. A conference call will be established. This feature is not available for a single line telephone.

- **Required System Programming**
  [606] Call Transfer to an Exchange Line
- **Related Feature Reference**
  Hold, Limited Call Duration
- **Operating Instructions Reference**
  1.5 During Conversation, "Transferring a Call to an Exchange Line (Call Transfer – to Exchange Line)"

Call Transfer – to Extension

Allows an extension user to transfer a received call, an intercom or an outside call, to another extension. Two types are available.

Screened Call Transfer: Announces the call to another extension before completing the transfer.

Unscreened Call Transfer: Immediately releases the call to another extension without an announcement.

- If the destination extension does not answer the call within the assigned time in program [201], the call will return to the transferring party.
- An outside call can be transferred to an extension by simply pressing a DSS button. It requires program [005].
- If Music on Hold is enabled, music is sent to the original external caller while being transferred. Sending a cyclic tone or music on hold can be programmed by program [111].
- During a 5-party conference, the user cannot transfer a call.

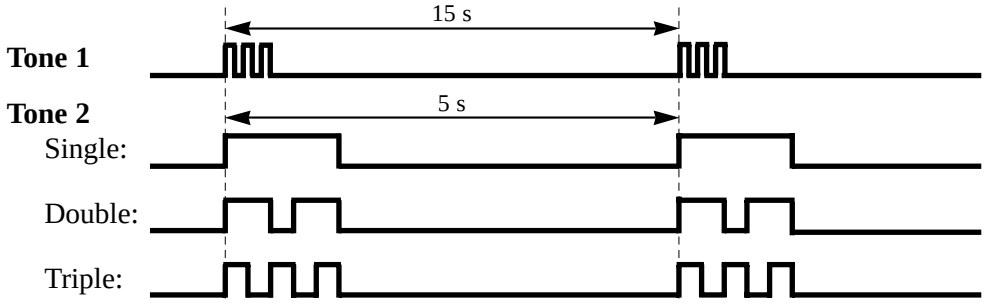
- **Required System Programming**
  [005] One-Touch Transfer Using a DSS Button
  [111] Hold Music Selection
  [201] Transfer Recall Time
- **Related Feature References**
  Conference (5-party), Hold, Music on Hold
- **Operating Instructions Reference**
  1.5 During Conversation, "Transferring a Call to an Extension (Call Transfer – to Extension)"

Call Waiting

During a conversation, a Call Waiting tone informs an extension user that there is a call waiting. The user can answer the second call by disconnecting the first call or placing it on hold. When Call Waiting is enabled, a Call Waiting tone is sent to the user under the following conditions.

1) When an outside call (except a doorphone call) is received, or
2) When another extension executes the Busy Extension Signalling feature.

- For proprietary telephone users, a Call Waiting tone (Tone 1 or Tone 2) can be selected in the Proprietary Telephone Settings. Tone 2 depends on System Programming. Program [423] is for outside calls and program [115] is for intercom calls.



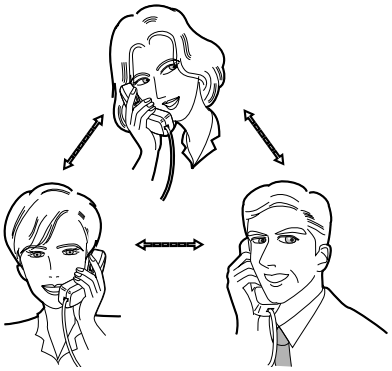
- **Required System Programming**
  [115] Extension Ringing Pattern Selection
  [423] Exchange Line Ringing Pattern Selection
- **Related Feature Reference**
  Hold
- **Operating Instructions References**
  1.2 Proprietary Telephone Settings,
  "Customising Your Telephone Functions", Call Waiting Tone Selection
  1.5 During Conversation, "Call Waiting"

Conference (3-party)

During a 2-party conversation, an extension user can add a third party to make a 3-party conference. The maximum number of members of a conference can be programmed in program [116].

- The possible combinations, through System Programming, are 3 extensions, 1 extension and 2 external parties, or 2 extensions and 1 external party.
- When a 2-party call is changed to a 3-party call or vice versa, a confirmation tone is sent to all 3 parties. The tone can be disabled by program [105].
- A 3-party call can also be established by the Executive Busy Override feature.

- **Required System Programming**
  [105] Conference Tone
  [116] Conference Pattern Selection
  [606] Call Transfer to an Exchange Line
- **Related Feature References**
  Executive Busy Override
- **Operating Instructions References**
  1.2 Proprietary Telephone Settings, “Customising the Buttons on Your Telephone”, CONF (Conference) Button
  1.7 Useful Features, “Conference (3-party)”



Conference (5-party)

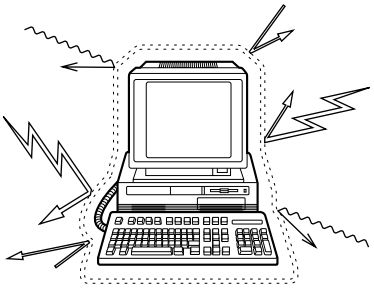
Allows an extension user to establish a 5-party conference when “5 party C-2 E-5” is selected in program [116].

- Up to 2 external parties can participate in a conference call.
- All 5 parties can be extensions.
- Only one 5-party conference can be established at one time.
- When a 5-party conference is established, a confirmation tone is sent to all parties. The tone can be disabled by program [105].
- The Executive Busy Override and the Call Park features are not available during a 5-party conference.

- **Required System Programming**
  [105] Conference Tone
  [116] Conference Pattern Selection
- **Related Feature References**
  Conference (3-party), Call Park, Executive Busy Override
- **Operating Instructions References**
  1.2 Proprietary Telephone Settings, “Customising the Buttons on Your Telephone”, CONF (Conference) Button
  1.7 Useful Features, “Conference (5-party)”

Data Line Security

Prevents an extension user from being interrupted by the Call Waiting and Executive Busy Override features. This feature also prevents a ring tone or an alarm tone from being sent when a call is kept waiting longer than a pre-determined time. Data communication devices, such as computers and facsimiles, connected to an extension port can operate without interruptions.



- **Related Feature References**
  Call Waiting, Executive Busy Override
- **Operating Instructions Reference**
  1.7 Useful Features, “Data Line Security”

Date and Time Setting

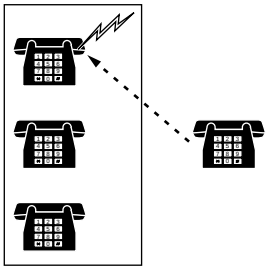
A manager or operator can adjust the current time.

- **Required System Programming**
  [000] Date and Time Setting
- **Operating Instructions Reference**
  1.8 Operator / Manager Service Features, “Date and Time Setting”

Direct In Line (DIL)

Enables an incoming outside call to go directly to a specified extension. This exchange line can be used by multiple extension users to make a call, but can only be used by one extension to receive a call. DIL can have a different destination in the day, night and/or lunch modes.

- If the destination extension is in an extension group which has enabled the Extension Hunting feature in program [100] “Hunting Group Set”, Extension Hunting (Terminate or Circular in program [101] “Hunting Type”) works when the extension is busy.



- **Required System Programming**
  [414]–[416] Exchange Line Mode — Day/Night/Lunch
- **Related Feature References**
  Extension Hunting, Time (Day/Night/Lunch) Service

Direct Inward System Access (DISA)

Allows an outside caller to access specific system features as if the caller is an extension in the system. The caller can have direct access to features such as:

- Placing an incoming call to an extension, extension group or operator. The caller also has the option of dialling the route for an extension using a 1 digit number (DISA built-in auto attendant number) via DISA calls.

The DISA feature operates without an optional card installed. If an outgoing message (OGM) which greets a caller and gives information, or fax detection is required, an optional OGM/FAX Detection Card must be installed. The system can detect a FAX (CNG) tone according to program [514]. An OGM can be programmed in program [502] (☞ “Outgoing Message (OGM)” in this section). When a caller reaches a DISA line, a message will greet the caller. Two different DISA messages can be recorded by the operator or manager. For example, one message can be used in day mode and the other in night mode, or they can be used for different exchange lines. If an optional OGM/FAX Detection Card is not installed, the caller will hear a short beep instead of the OGM (Internal DISA).

- "DISA1" or "DISA 2" must be assigned to exchange line(s) as the exchange line mode in programs [414] through [416].
- After the DISA Delayed Answer Time assigned in program [504] expires and a ringback tone is returned to the caller, a DISA call will be answered. The caller can dial during the message or after the tone.
- This system can store up to 10 programmable DISA built-in auto attendant numbers in program [501]. Each number is 1 digit.
- The DISA built-in auto attendant number may be the same as the first digit of other numbers (extension number, etc.). To avoid confusion, the system waits for the second digit for a preprogrammed amount of time in program [517] (default: 2 seconds). If the timer expires, the system will assume that the first digit is a DISA built-in auto attendant number.
- Only one OGM/FAX Detection Card can be installed .

- **Connection Reference**
  2.15 OGM/FAX Detection Card Installation
- **Required System Programming**

  To enable the DISA feature

  [414]–[416] Exchange Line Mode — Day/Night/Lunch
  [420] Calling Party Control (CPC) Signal
  [500] DISA Incoming Dialling Mode Selection
  [501] DISA Built-in Auto Attendant
  [502] OGM Mode Selection
  [503] FAX Connection
  [506] DISA Busy Mode
  [510] DISA No Dial Mode
  [513] Cyclic Tone Detection
  [514] FAX Tone Detection
  [516] DISA Incoming Assignment

  To set DISA timer values

  [504] DISA Delayed Answer Time
  [505] DISA Waiting Time after OGM
  [517] DISA AA Wait Time
  [519] DISA OGM Mute Time

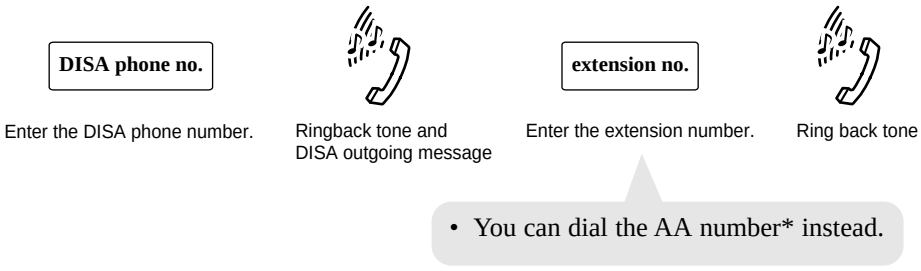
  To enable the Intercept Routing feature

  [408]–[410] Flexible Ringing Assignment — Day/Night/Lunch
  [507] DISA Intercept Mode
  [508] DISA Ringing Time before Intercept
  [509] DISA Ringing Time after Intercept
  [515] Intercept Time for Internal DISA
- **Related Feature References**
  Extension Hunting,
  Intercept Routing, Outgoing Message (OGM)

DISA Operation

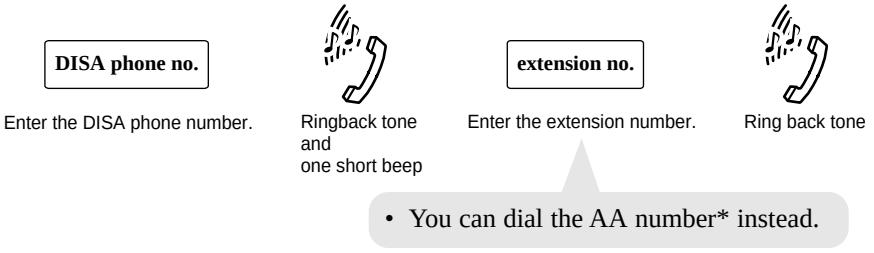
Calling an extension by following the outgoing message

from an External Party



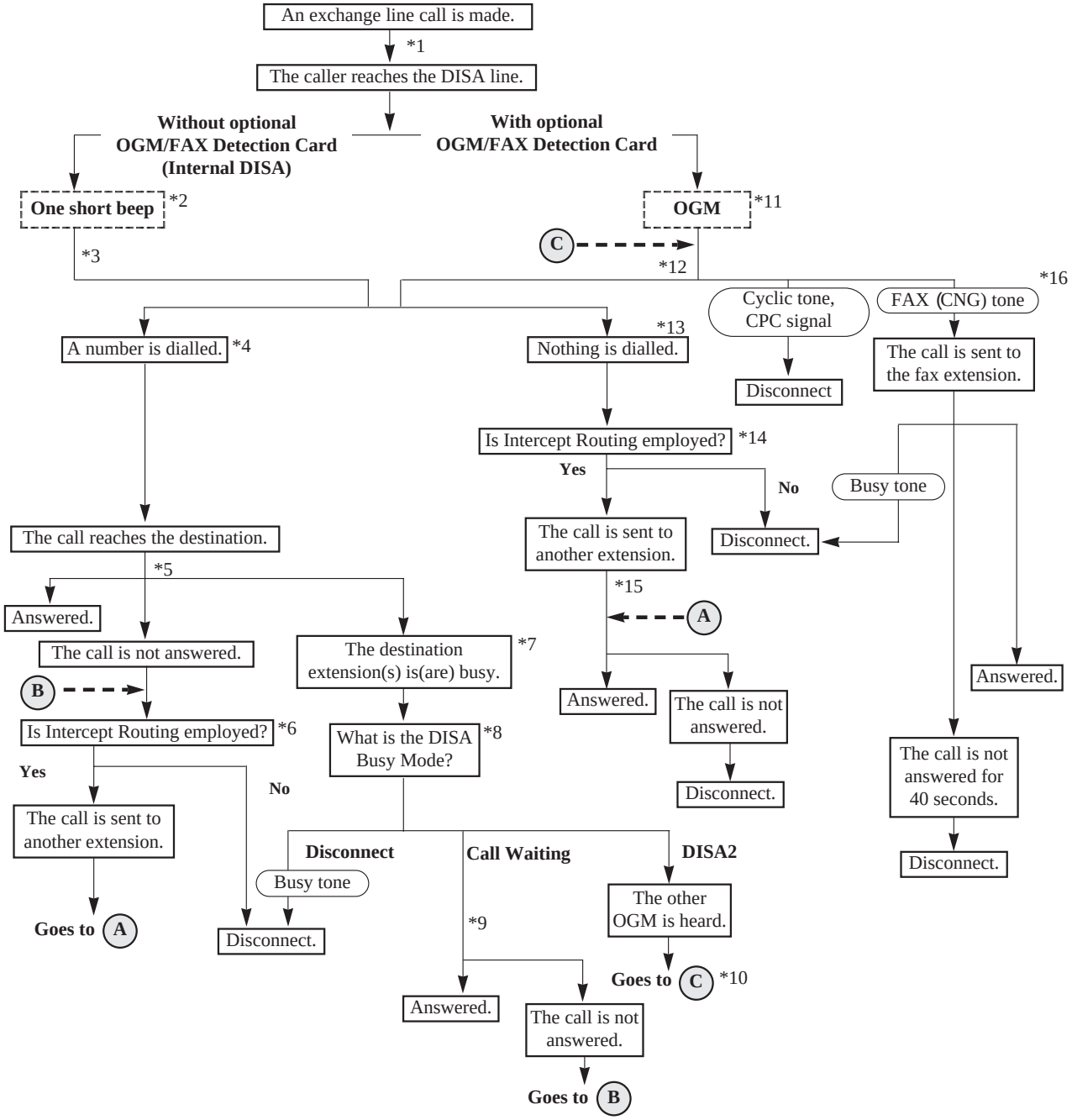
Calling an extension without an outgoing message (Internal DISA)

from an External Party



AA number*: A DISA built-in auto attendant number assigned in program [501] “DISA Built-in Auto Attendant”.

Flow chart of possible cases and results for DISA calls



Note: The explanation for *1 through *16 is on the next page.

*1: The DISA Delayed timer starts. This is the time between a call reaching the system and being received. The time is assigned in program [504].

*2: When the assigned time period in program [519] expires, the system sends a short beep to the caller.

*3: The Intercept Timer for Internal DISA starts. This is the time the system waits for the number sent by the caller. If nothing is entered by the caller during this time, the system will regard it as "Nothing is dialled." The time is assigned in program [515].

*4: The system can accept the following numbers:
- **200 through 299** as an extension number.
- **0 or 9** as the operator call number when the operator is assigned in program [008] "Operator Assignment" and "Without AA" is assigned in program [500]. Even if "With AA" is assigned, 0 or 9 is regarded as the operator call number if nothing is assigned to "0" or "9" in program [501].
- **0 through 9** as a built-in auto attendant number when "With AA" is assigned in program [500]. The DISA AA Wait timer starts after receiving the first 1-digit number. If the timer expires, the system will assume that the first digit is an AA number. The time is assigned in program [517].

*5: The DISA Ring Timer Before Intercept starts. The destination telephone(s) will ring for the time programmed in [508].

*6: The system treats the call according to program [507] as follows.
- **Disconnect** – the call is disconnected.
- **Intercept** – the call is sent to the extensions programmed in [408]-[410] "Flexible Ringing Assignment – Day/Night/Lunch".

If the call is still not answered within the time programmed in [509], it will be disconnected.

*7: If the destination extension belongs to a hunting group and all extensions in the group are busy, the system will check the DISA Busy Mode. If the destination is a DISA ring group, the DISA Busy Mode will not work for the call. The system regards the call as unanswered.

*8: The DISA Busy Mode is selected in program [506]. There are 3 modes as follows.
- **Disconnect** – the caller hears a busy tone and a call is disconnected.
- **Call Waiting** – the destination extension hears a call waiting tone if they have enabled Call Waiting.
- **DISA2** – if "MODE2" is assigned in program [502] and a message is recorded in OGM2, the caller will hear the message and the system waits for the new destination.

*9: The DISA Ring Timer Before Intercept starts. The destination telephone(s) will ring for the time programmed in [508].

*10: In this case, the system does not accept a line access code. If nothing is recorded in OGM2 or OGM2 is used for another caller, the caller will hear a busy tone and the call is disconnected.

*11: The OGM is sent to the caller according to programs [414]–[416] and [502] when the assigned time in program [519] expires. If an OGM is not recorded, the DISA Wait Timer After OGM programmed in [505] starts immediately.
When the system detects a FAX (CNG) tone while the OGM is being sent, the call is sent to the FAX extension assigned in program [503]. When the system detects a cyclic tone or CPC signal while the OGM is being sent, the call is disconnected.

*12: The DISA Wait Timer After OGM starts. The system waits for a number from the caller during the time assigned in program [505]. When the system detects a FAX (CNG) tone during the programmed time, the call is sent to the FAX extension. When the system detects a cyclic tone or CPC signal during the programmed time, the call is disconnected.

*13: After the DISA Wait Timer After OGM or the Intercept Timer for Internal DISA expires, the system regards that nothing was dialled.

*14: The system treats the call according to program [510] as follows.
- **Disconnect** – the call is disconnected.
- **Intercept** – the call is sent to the extensions programmed in [408]-[410]. If all extensions are assigned to “Disable”, the call will be disconnected.

*15: The DISA Ring Timer After Intercept starts. The destination telephone(s) will ring for the time programmed in [509]. If the call is not answered during the programmed time, the call will be disconnected.

*16: The FAX extension assigned in program [503] receives the call. When the extension is busy, the system sends a busy tone to the sending FAX. If the call is not answered after 40 seconds, the call will be disconnected.
Program [514] sets how many times the FAX (CNG) tone must be detected before the system recognises the incoming signal as facsimile data.

Display Contrast Adjustment (KX-T7130 only)

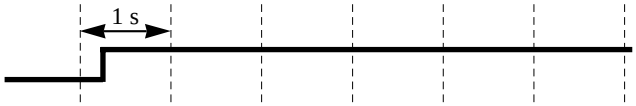
Allows a display proprietary telephone user to adjust the display contrast with the CONTRAST selector.

- **Operating Instructions Reference**
  1.2 Proprietary Telephone Settings, “Display Contrast Adjustment”

Distinctive Dial Tones

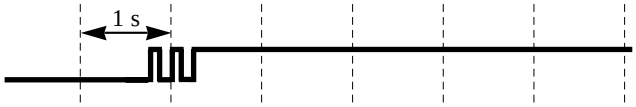
An extension user will hear 3 types of dial tone patterns which give information about the features activated on the telephone.

Dial Tone 1: This is a normal dial tone. None of the features listed in Dial Tone 2 are activated.



Dial Tone 2: Sent when any of the following features are set.

- Absent Message Capability
- Background Music (BGM) (for proprietary telephones only)
- Call Forwarding
- Call Pickup Deny
- Data Line Security
- Do Not Disturb (DND)
- Electronic Extension Lockout
- Message Waiting (for proprietary telephones only)
- Pickup Dialling (for single line telephones only)
- Remote Extension Lock Control
- Timed Reminder



Dial Tone 3: Sent when making an Account Code Entry and answering a Timed Reminder call. Also sent when going off-hook with a single line telephone which has a message in a Voice Processing System.

- **Operating Instructions Reference**
  1.7 Useful Features, “Distinctive Dial Tones”

Do Not Disturb (DND)

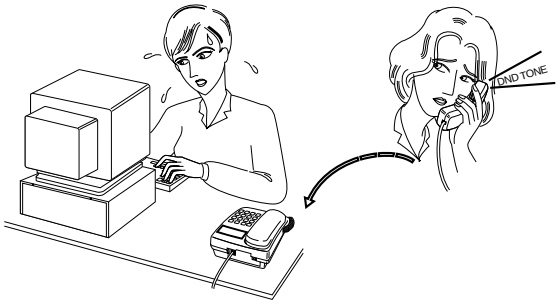
<Do Not Disturb (DND)>

Allows an extension user to prevent other parties from disturbing them. The extension will not receive intercom or outside calls.

<Do Not Disturb (DND) Override>

Allows an extension user enabled in program [609] to call an extension which has set the Do Not Disturb (DND) feature.

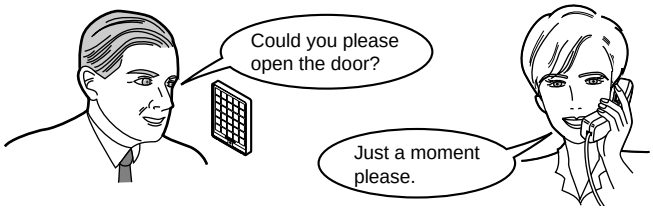
- If your proprietary telephone (PT) is not supplied with the FWD/DND button, it can be assigned to a flexible line key in the Proprietary Telephone Settings.
- DND does not work for the following calls: Hold recall or Timed Reminder.
- A PT user in the DND mode can answer a call by pressing the corresponding flashing button.
- If the Call Forwarding feature has already been set, setting the DND feature will cancel Call Forwarding.



- **Required System Programming**
  [609] Do Not Disturb Override
- **Related Feature References**
  Call Forwarding,
  Timed Reminder
- **Operating Instructions References**
  1.2 Proprietary Telephone Settings, "Customising the Buttons on Your Telephone", FWD/DND (Forward/Do Not Disturb) Button
  1.7 Useful Features, "Rejecting Incoming Calls (Do Not Disturb — DND)"
  1.7 Useful Features, "Calling an Extension which Denies Receiving Calls (Do Not Disturb Override)"

Door Opener

Up to 4 Door Openers can be connected to the system. The door can be unlocked by a pre-assigned extension users in programs [703]-[705].



- An optional Doorphone/Door Opener Card must be installed to the system and a user-supplied door opener to the door to be opened. Four openers can be installed.
- The door opener will open the door even if a doorphone is not installed.
- The door opener timer can be modified in program [709].

- **Connection Reference**
  2.16 Doorphone and Door Opener Connection
- **Required System Programming**
  [703]–[705] Door Opener Assignment — Day/Night/Lunch
  [709] Door Opener Time
- **Related Feature Reference**
  Doorphone Call
- **Operating Instructions Reference**
  1.7 Useful Features, “Door Opener”

Doorphone Call

Up to 4 Doorphones (KX-T30865) can be installed. If a visitor presses the doorphone button, a pre-assigned extension user in programs [700]-[702] can answer the call and talk to the visitor. Any extension user can call a doorphone. The doorphones are also used for the Room Monitor feature.

- An optional Doorphone/Door Opener Card must be installed to the system and a doorphone. Four doorphones can be installed.
- Doorphone 1 and 2 cannot be used simultaneously. When one is in use, an extension user cannot have a conversation with the other. Doorphone 3 and 4 are the same.
- An access tone can be programmed in [707] to be sent to a monitored doorphone before room monitoring starts.
- The ring tone from the doorphone call is programmable in [706].

- **Connection Reference**
  2.16 Doorphone and Door Opener Connection
- **Required System Programming**
  [700]–[702] Doorphone Ringing Assignment — Day/Night/Lunch
  [706] Doorphone Ringing/Tone Pattern Selection
  [707] Doorphone Access Tone Selection
  [708] Doorphone Ringing Time
- **Related Feature References**
  Door Opener, Room Monitor
- **Operating Instructions References**
  1.7 Useful Features, “Room Monitor”
  1.7 Useful Features, “Doorphone Call”

DSS Console

The Direct Station Selection (DSS) Console provides direct access to extensions, a busy lamp display, as well as 16 PF (Programmable Feature) buttons.

The DSS Console must be programmed to work with a proprietary telephone (PT). The port number of the DSS Console and its associated PT are assigned in programs [003] and [004].

Up to 2 consoles can be installed per system.

If a feature like One-Touch Dialling is assigned to a DSS button or PF button, accessing the feature can be done easily by pressing the corresponding button. This is very useful for an operator or manager. Refer to the Operating Instructions for more details.

- Programming the DSS and PF buttons can be done only from the paired telephone.
- Indicating the Forward (FWD) or Do Not Disturb (DND) status of corresponding extensions using a DSS button indication is programmable in [112].

- **Connection Reference**
  2.8 Extension Connection
- **Required System Programming**
  [003] DSS Console Port Assignment
  [004] Paired Telephone Assignment for DSS Console
  [112] DSS Console Indication Mode
- **Operating Instructions Reference**
  1.9 DSS Console Features

Emergency Call

Allows an extension user to access a pre-assigned emergency number which can be dialled regardless of any restrictions.

- Up to 5 emergency numbers can be stored.
- An emergency call is allowed even in the following cases;
  — in Account Code Modes (Verify–All and Forced modes),
  — in any call barring COS number, and
  — in Electronic Extension Lockout.

- **Required System Programming**
  [309] Emergency Dial Number Set
- **Related Feature References**
  Account Code Entry, Call Barring, Extension Lock
- **Operating Instructions Reference**
  1.3 Making Calls, “Making Emergency Calls (Emergency Call)”

Exchange Line Ringing Selection

When an outside call is received at an extension, the user can select whether their extension will ring or not.

- Select “Enable” in programs [408]–[410].

- **Required System Programming**
  [408]–[410] “Flexible Ringing Assignment — Day/Night/Lunch
- **Operating Instructions Reference**
  1.2 Proprietary Telephone Settings, “Customising Your Telephone Functions”, Exchange Line Ringing Selection

Executive Busy Override

<Executive Busy Override – Extension>

Allows an extension user enabled in program [608] to interrupt an existing intercom call. A 3-party conference will be established.

<Executive Busy Override – Exchange Line>

Allows a proprietary telephone user enabled in program [608] to interrupt an existing outside call or add a third party. A 3-party conference will be established.

<Executive Busy Override Deny>

Allows an extension user to prevent other extension users from interrupting their conversation.

- The Executive Busy Override feature will not work if the extension engaged the conversation has set Executive Busy Override Deny or Data Line Security.
- When a 3-party call is changed to a 2-party call or vice versa, a confirmation tone will be sent to all parties. This tone can be disabled by program [105].

- **Required System Programming**
  [105] Conference Tone
  [608] Executive Busy Override
- **Related Feature Reference**
  Conference (3-party)
- **Operating Instructions References**
  1.3 Making Calls, “Interrupting an Existing Call (Executive Busy Override)”
  1.3 Making Calls, “Denying ‘Interrupting an Existing Call’ (Executive Busy Override Deny)”

Extension Button Confirmation (KX-T7130 only)

Allows a display proprietary telephone user to confirm the values stored in the buttons, such as the REDIAL button or flexible line key, by pressing the corresponding button while on-hook.

- **Operating Instructions Reference**
  1.7 Useful Features “Extension Button Confirmation (KX-T7130 only)”

Extension Feature Clear

Allows an extension user to reset the following extension features to the default settings.

- Absent Message Capability
- Automatic Callback Busy (Camp-On)
- Background Music (BGM)
- Call Forwarding
- Call Pickup Deny
- Call Waiting
- Data Line Security
- Do Not Disturb (DND)
- Executive Busy Override Deny
- Log-In/Log-Out
- Message Waiting – (All messages will be erased.)
- Pickup Dialling – (The stored telephone number will be erased.)
- Paging Deny
- Room Monitor
- Timed Reminder
- Voice Mail Integration

- **Operating Instructions Reference**
  1.7 Useful Features, “Cancelling the Feature Settings (Extension Feature Clear)”

Extension Group

The system supports 8 extension groups. In an extension group, the following features can be activated.

- Group Call Pickup: Any member of an extension group can pick up a call directed to another member in the same group.
- Paging – Group: Any member of an extension group can make a voice announcement to another group member.

A hunting group, DISA ring group or UCD group is a specific extension group. The following operation as well as the features above can be activated for a hunting group, DISA ring group or UCD group.

Hunting Group

An extension group enabled in program [100] "Hunting Group Set" will perform the Extension Hunting feature. See "Extension Hunting" in this section.

DISA Ring Group

All extensions in a DISA ring group assigned as an auto attendant destination in program [501] "DISA Built-in Auto Attendant" will ring simultaneously. Selecting "DISA1" or "DISA2" in programs [414]–[416] "Exchange Line Mode — Day/Night/Lunch" is required. Also, you must select "With AA" in program [500] "DISA Incoming Dialling Mode Selection".

UCD Group

One extension group assigned as the UCD group in program [520] "UCD Group" can be the destination of incoming outside calls via the UCD feature. Selecting "UCD" in programs [414]–[416] "Exchange Line Mode — Day/Night/Lunch" is required.

- **Required System Program Address**
  [600] Extension Group Assignment
- **Related Feature References**
  Call Pickup, Direct Inward System Access (DISA), Extension Hunting, Paging, Uniform Call Distribution (UCD)

Extension Hunting

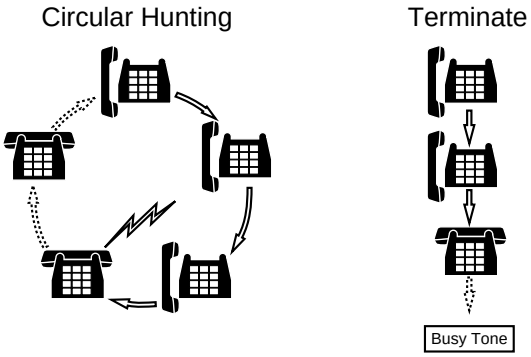
If a called extension is busy, Extension Hunting redirects the incoming call to an idle extension in an extension group in numerical order. Idle extensions are automatically hunted according to programming. The following 2 hunting types are available.

Circular hunting: The extensions are hunted one time in numerical order. If all extensions are busy, a busy tone will be heard.

Terminate hunting: The extensions are hunted until the extension which has the highest port number in the group is reached. If all higher order numbers are busy, the search will end and a busy tone will be heard.

- One hunting type can be selected for each extension group.
- To leave the hunting group temporarily, use the Log-Out feature. To rejoin, use the Log-In feature.
- If the called extension has set Do Not Disturb (DND), Call Forwarding or Log-Out, Extension Hunting will skip the extension. However, Extension Hunting will not skip the extension which receives the call first, even if it has set Do Not Disturb (DND) or Call Forwarding.

- **Required System Programming**
  - [100] Hunting Group Set
  - [101] Hunting Type
  - [600] Extension Group Assignment
- **Related Feature References**
  - Call Forwarding
  - Do Not Disturb (DND)
  - Extension Group
  - Log-In/Log-Out



Extension Lock

<Electronic Extension Lockout>

Allows an extension user to lock their extension so that other users cannot make outside calls until it is unlocked. Any 4-digit code can be used to lock and unlock an extension.

<Electronic Extension Lockout – CANCEL ALL>

The operator and manager can cancel Electronic Extension Lockout of all extensions at one time.

<Remote Extension Lock Control>

The operator and manager are given the privilege of controlling Electronic Extension Lockout at any extension by using the DSS console. The operator and manager can see the status of each extension, locked or unlocked, by the pre-assigned DSS button LED on the DSS console. For example, this feature is useful for a small hotel or motel when guests are checked out.

- The Remote Extension Lock Control overrides the Electronic Extension Lockout. If the operator or manager sets Remote Extension Lock on an extension that has already been locked by the extension user, the user cannot unlock it.
- A call barring class can be assigned to an extension which has set the Electronic Extension Lockout and Remote Extension Lock Control features in program [312] "Call Barring – Extension Lock Boundary Class". Certain types of outgoing outside calls are allowed depending on the assigned call barring class.

- **Operating Instructions References**
  - 1.6 Before Leaving Your Desk, "Locking Your Telephone (Electronic Extension Lockout)"
  - 1.8 Operator / Manager Service Features, "Electronic Extension Lockout – CANCEL ALL"
  - 1.8 Operator / Manager Service Features, "Remote Extension Lock"
  - 1.9 DSS Console Features "Initial Settings", Extension Lock Button Assignment (Operator/Manager only)

Extension Password / System Password

The extension password assigned by the manager (extension port 01) to each extension can be used for the Walking COS feature.
The system password is used for entering System Programming and also before assigning the extension password.

- **Required System Programming**
  [002] System Password
- **Related Feature References**
  Walking COS
- **Operating Instructions Reference**
  1.8 Operator / Manager Service Features, "Extension Password Set (Manager only)"

External Feature Access

Allows an extension user to access special features (e.g. Call Waiting) offered by the Local Exchange or host PBX. This is done by placing the current call on hold and sending a recall signal using either the RECALL button or the feature number. This feature is effective only during an outside call.

- When “MODE2” is selected in program [110] and the RECALL button is pressed for longer than the time programmed in [418], this feature will not work.
- The recall time must be assigned in program [418] as required by the host PBX or exchange line.

- **Required System Programming**
  [110] Recall Key Mode
  [418] Recall Time
- **Related Feature References**
  Host PBX Access, Recall
- **Operating Instructions Reference**
  1.7 Useful Features, “External Feature Access”

Flexible Buttons

A proprietary telephone (PT) user can change the flexible buttons on the telephone and DSS console to certain function buttons. For example, if the telephone has more line keys than available exchange lines, the unused line keys may be changed to One-Touch Dialling buttons, etc.

The 4 types of flexible buttons are as follows:

- **Flexible line keys** (located on a PT only)
- **Flexible DSS Buttons** (located on a DSS Console only)
- **Programmable Feature (PF) Buttons** (located on a PT and DSS Console)
- **Flexible MESSAGE Buttons**

Check the required operation first. If the telephone is not provided with the button, assigning the button can be performed in the Proprietary Telephone Settings.

Function	Programmable Button			
	LINE	DSS	PF	MESSAGE
DSS (Direct Station Selection)	✔	✔		✔
One-Touch Dialling	✔	✔	✔	✔
CONF (Conference)	✔			
FWD/DND (Forward/Do Not Disturb)	✔			
SAVE	✔			
Log-In/Log-Out	✔			
Single Exchange Line (S-CO)	✔			
Other Exchange Line (O-CO)	✔			
Trunk Group (G-CO)	✔			
MESSAGE (Message Waiting)				✔
Day		✔		
Night		✔		
Lunch		✔		
Extension Lock		✔		

"✔" indicates that the feature is available.

- **Operating Instructions Reference**
  1.2 Proprietary Telephone Settings, "Customising the Buttons on Your Telephone"

Handsfree Answerback

Allows a proprietary telephone with a speakerphone to answer an intercom call without lifting the handset. This feature performed by pressing the AUTO ANSWER/MUTE button.

- This feature does not work for incoming outside calls or doorphone calls.

- **Operating Instructions Reference**
  1.4 Receiving Calls, “Handsfree Answerback”

Handsfree Operation

Allows a proprietary telephone user to dial and talk to the other party without lifting the handset. Pressing one of the following buttons activates the handsfree mode when the SP-PHONE/MONITOR button indicator is off:

SP-PHONE button, **MONITOR button**, **INTERCOM button**, or **line key**.

- The KX-T7050 can perform handsfree dialling operations, etc., but cannot have a handsfree conversation.

- **Operating Instructions Reference**
  1.3 Making Calls, “Handsfree Operation”

Hold

<Call Hold>

Allows an extension user to place an intercom and/or outside call on hold. The held call can be retrieved by the user who held it, or by any other extension (Call Hold Retrieve).

With a single line telephone (SLT), either one outside or intercom call can be held at one time. If an SLT user wants to hold both calls, use the Call Park feature. An SLT user can select how to operate the Call Hold feature by program [104].

<Exclusive Hold>

Allows a proprietary telephone user to prevent other extension users from retrieving their held call. Only the user who held the call can retrieve it. This feature is not available for an SLT.

- Only one intercom call can be placed on hold. For a proprietary telephone, outside calls and one intercom call can be placed on hold at the same time.
- If a held call is not retrieved within the assigned time in program [200], the extension user who held it will hear a ring tone or an alarm tone. If the user is on-hook and their SP-PHONE/MONITOR button indicator is off, the phone will ring (Hold Recall). If the user is off-hook or in the handsfree mode, an alarm tone will be sent to the built-in speaker of a proprietary telephone or the handset receiver of a single line telephone at 15-second intervals (Hold Alarm). If "Disable" is selected in program [200], nothing will be heard.
- If a held outside call is not answered within thirty minutes, it will be automatically disconnected.
- For outside calls, music is sent to the external party on hold, if available (Music on Hold).
- During a 5-party conference, the Hold feature cannot be activated.

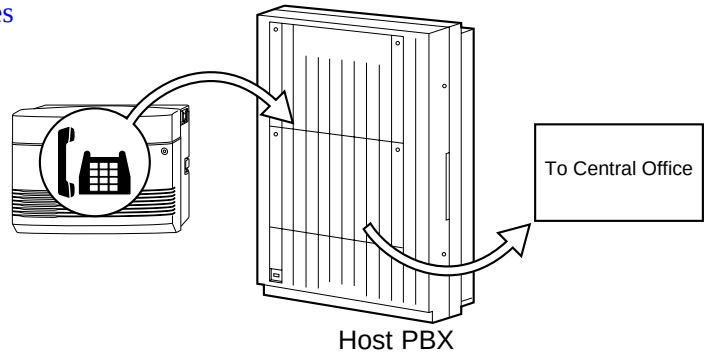
- **Required System Programming**
  [104] Hold Mode Selection
  [200] Hold Recall Time
- **Related Feature References**
  Call Park, Music on Hold/Background Music (BGM), Recall Button on a Single Line Telephone
- **Operating Instructions References**
  1.5 During a Conversation, "Placing a Call on Hold (Call Hold)"
  1.5 During a Conversation, "Placing a Call on Hold Exclusively (Exclusive Hold)"
  1.5 During a Conversation, "Retrieving a Call on Hold (Call Hold Retrieve)"

Host PBX Access

The system may be installed behind an existing host PBX. This is performed by connecting a line from the host to an exchange line in the system.

- A Host PBX Access code assigned in program [403] is required to access an exchange line of the host PBX.
- Access to the host PBX during a conversation is also possible (External Feature Access).

- **Required System Programming**
  [403] Host PBX Access Codes
  [417] Pause Time
- **Related Feature Reference**
  External Feature Access

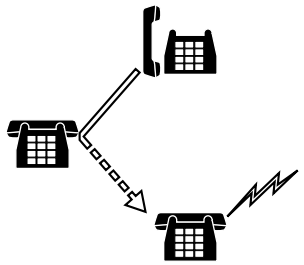


Intercept Routing

Provides automatic redirection of incoming outside calls via the DISA or UCD feature. The Intercept Routing feature works in the following 2 cases.

1) When nothing is dialled after a dial tone or OGM is sent to the caller. (The DISA feature only)
2) When the call is not answered within a programmed time. This is called Intercept Routing – No Answer (IRNA).

- **Required System Programming**
  - [408]–[410] Flexible Ringing Assignment — Day/Night/Lunch
  - [507] DISA Intercept Mode
  - [508] DISA Ringing Time before Intercept
  - [509] DISA Ringing Time after Intercept
  - [510] DISA No Dial Mode
  - [523] UCD Busy Mode
  - [524] UCD Intercept Mode
  - [525] UCD Ringing Time before Intercept
  - [526] UCD Ringing Time after Intercept



- **Related Feature References**
  Direct Inward System Access (DISA), Uniform Call Distribution (UCD)

Intercom Calling

Allows an extension user to make a call to another extension.

- An extension number and a name can be assigned in programs [009] and [604]. If assigned, they will be shown on the display proprietary telephone during an intercom call.
- The DSS buttons permit a proprietary telephone user one-touch access to an extension. The DSS function can be assigned to a flexible line key in the Proprietary Telephone Settings.
  The DSS buttons on the DSS console can also be used.
- An extension user can press the DSS buttons directly to make an intercom call without going off-hook. This can be enabled by program [126].

- **Required System Programming**
  - [009] Extension Number Assignment
  - [126] DSS Off-Hook Mode
  - [604] Extension Name Setting
- **Operating Instructions References**
  - 1.2 Proprietary Telephone Settings, “Customising the Buttons on Your Telephone”, DSS (Direct Station Selection) Button
  - 1.3 Making Calls, “Intercom Calling”
  - 1.9 DSS Console Features, “Initial Settings”, Extension Number Assignment

Language Selection

The selected language in program [615] is shown on the LCD display of a proprietary telephone during operation and Proprietary Telephone Settings, but not used during System Programming. The selected language in program [806] is used for an SMDR printout.

- **Required System Programming**
  [615] LCD Language Assignment
  [806] SMDR Language Assignment

Limited Call Duration

The system disconnects outside outgoing calls when a specific timer expires. The timer is in effect when making an outside call, transferring an intercom call to an exchange line or forwarding an intercom call to an exchange line. Limiting the time of the call can be assigned through System Programming.

- An alarm tone will be sent to both parties 15 seconds before the assigned time limit.

- **Required System Programming**
  [212] Exchange line Duration Time Limit
  [613] Exchange line Duration Time Limit Selection
- **Related Feature References**
  Call Forwarding, Call Transfer – to Exchange line

Line Access Keys

A proprietary telephone (PT) user must assign one of the following 3 types of line keys to flexible line keys in the Proprietary Telephone Settings. This permits making or receiving outside calls. The default setting for the flexible line keys (CO 1 – CO 6) are Single Exchange Line (S-CO) keys. CO 1 corresponds to exchange line 1, CO 2 corresponds to exchange line 2, etc.

<Trunk Group (G-CO) Key>
Receiving or making outside calls is on an trunk group basis. The trunk group is assigned in program [404]. Any incoming call from any exchange line in the trunk group arrives at the G-CO key. To make an outside call, the user can access an idle exchange line in the group by simply pressing the assigned G-CO key.

<Single Exchange Line (S-CO) Key>
Receiving or making outside calls is done using a specific exchange line. An incoming call from the specific exchange line arrives at the S-CO key. To make an outside call, the user can access the specific exchange line by simply pressing the assigned S-CO key.

<Other Exchange Line (O-CO) Key>
Exchange lines, which are not assigned to an S-CO or G-CO key, can be assigned to a flexible line key as the O-CO key. An incoming call on an exchange lines arrives at the O-CO. To make an outside call, the user simply presses the assigned O-CO key.

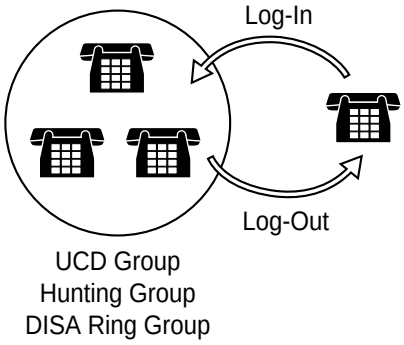
- The same trunk group can be assigned to more than one G-CO key on the same PT.
- The same line can be assigned to an S-CO key and G-CO key. The S-CO key has priority.
- Immediate, delayed, no ringing or no incoming calls (disable) can be selected by programs [408] through [413] on an extension-exchange line basis.
- A ringing pattern can be selected for each exchange line by program [423].

- **Required System Programming**
  [400] Exchange Line Connection Assignment
  [404] Trunk Group Assignment
  [405]–[407] Flexible Outward Dialling Assignment — Day/Night/Lunch
  [408]–[410] Flexible Ringing Assignment — Day/Night/Lunch
  [411]–[413] Delayed Ringing Assignment — Day/Night/Lunch
  [423] Exchange Line Ringing Pattern Selection
- **Related Feature References**
  Outside Calling, Receiving Calls, Ringing Pattern Selection
- **Operating Instructions Reference**
  1.2 Proprietary Telephone Settings, “Customising the Buttons on Your Telephone”, Line Access Keys

Log-In/Log-Out

Allows an extension user to Log-In (join) or Log-Out (leave) a hunting, DISA ring or UCD group temporarily. Extensions in the log-out mode will not receive calls by Extension Hunting, DISA or UCD but will receive other calls, not like the Do Not Disturb (DND) feature. The Log-In/Log-Out button can be assigned to a flexible button in the Proprietary Telephone Settings. The lighting patterns of the Log-In/Log-Out button on a proprietary telephone and status are as follows.

Off: Log-In mode
Red: Log-Out mode



- There should be at least one extension that is in the Log-In mode in a group.

- **Related Feature References**
  Direct Inward System Access (DISA),
  Extension Group,
  Extension Hunting, Uniform Call Distribution (UCD)
- **Operating Instructions References**
  1.2 Proprietary Telephone Settings, “Customising the Buttons on Your Telephone”, Log-In/Log-Out Button
  1.7 Useful Features, “Joining or Leaving a Call Distribution Group (Log-In/Log-Out)”

Message Waiting

Allows an extension user to notify the called extension of a message waiting when the called extension is busy or does not answer the call. Only a proprietary telephone user with a MESSAGE button can know there is a message waiting if the LED on the MESSAGE button lights red. Pressing the lit MESSAGE button will reply to the message by calling the extension which left the message. The messages which are stored in the mailbox of the Voice Processing System can also be heard by following the Voice Mail prompts after pressing the lit MESSAGE button (Voice Mail Integration).

- Cancelling the message can be performed from the extension sending it or from the extension receiving it.
- Each extension can have a maximum of 8 simultaneous messages.
- Messages are always left at the original extension. They cannot be sent to a Call Forwarding or Extension Hunting destination.

- **Operating Instructions References**
  - 1.2 Proprietary Telephone Settings, “Customising the Buttons on Your Telephone”, Restoring the MESSAGE button
  - 1.7 Useful Features, “Leaving a Message Notification (Message Waiting)”
  - 1.7 Useful Features, “Voice Mail Integration for KX-TVP100”

Microphone Mute

Allows a proprietary telephone user to turn off the microphone for privacy.

- The user’s voice will only be muted during a handsfree conversation. The user can hear the other party’s voice during Microphone Mute.

- **Operating Instructions Reference**
  - 1.5 During a Conversation, “Turning off the Microphone (Microphone Mute)”

Music on Hold / Background Music (BGM)

While an external party is on hold, music is automatically generated.

- Operations such as Call Hold and Call Transfer activate Music on Hold.
- A user-supplied external music source, such as a radio, must be connected to the system when "External" is selected in program [111]. One external music source can be connected to the system. The music source is used for Music on Hold and/or BGM.
- When "Tone" is selected in program [111], the cyclic tone is used only for Music on Hold and the external music source is used for BGM.

- **Connection Reference**
  2.10 External Music Connection
- **Required System Programming**
  [111] Hold Music Selection
- **Related Feature References**
  Hold, Call Transfer – to Exchange line, Call Transfer – to Extension, Uniform Call Distribution (UCD)
- **Operating Instructions Reference**
  1.7 Useful Features, "Turning on the Background Music (BGM)"

One-Touch Dialling

Allows a proprietary telephone user one-touch access to a desired party or system feature. This is done by storing an extension number, telephone number or a feature number (up to 24 digits) in a One-Touch Dialling button. One-Touch Dialling buttons can be assigned to flexible buttons in the Proprietary Telephone Settings.

- An account code can be stored into a One-Touch Dialling button.
- A number consisting of 25 digits or more can be stored by dividing it and storing it in 2 One-Touch Dialling buttons.

- **Operating Instructions References**
  1.2 Proprietary Telephone Settings, "Customising the Buttons on Your Telephone" One-Touch Dialling button
  1.3 Making Calls, "Dialling by Simply Pressing a Button (One-Touch Dialling)"
  1.9 DSS Console Features, "Initial Settings"
  1.9 DSS Console Features, "One-Touch Dialling"
  1.9 DSS Console Features, "One-Touch Access for System Features"

Operator / Manager Extension

The system supports one operator. Any extension can be designated as an operator in program [008]. Extension port 01 is the system manager extension. The extension assigned as an operator or manager has the ability to perform the following operations.

- Setting the Date and Time
- Cancelling the Electronic Extension Lockout
- Setting/Cancelling the Remote Extension Lock
- Setting/Cancelling/Confirming the Timed Reminder (Wake-up Call) Remotely
- Recording and Playing the Outgoing Message
- Changing the Day/Night/Lunch Mode

The manager extension can also perform System Programming and the following operation.

- Setting the Extension Password

- **Required System Programming**
  [008] Operator Assignment
- **Operating Instructions Reference**
  1.8 Operator / Manager Service Features

Operator Call

Allows an extension user to call an operator within the system by dialling the feature number assigned in program [121]. One extension can be assigned as the operator in program [008].

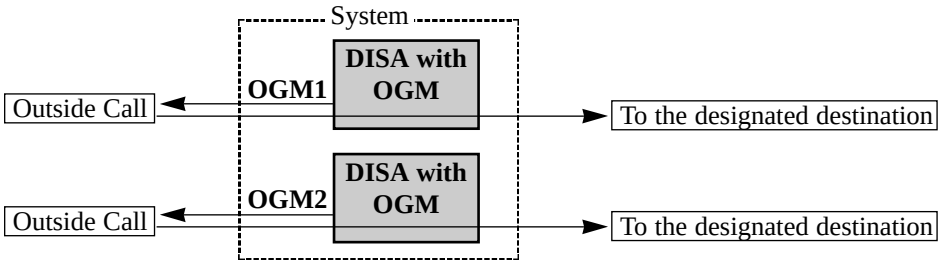
- If an operator is not assigned, this feature is not available and a reorder tone will be heard.
- Every extension user can reach the operator just by dialling the operator call number (0 or 9) assigned in program [121] “Automatic Exchange Line Access Number Selection”.

- **Required System Programming**
  [008] Operator Assignment
  [121] Automatic Exchange Line Access Number Selection
- **Related Feature Reference**
  Automatic Exchange Line Access Number
- **Operating Instructions Reference**
  1.3 Making Calls, “Calling an Operator (Operator Call)”

Outgoing Message (OGM)

Allows the extension assigned as an operator or manager to record up to 2 outgoing voice messages (maximum 30 seconds each). This message is played when a caller accesses the DISA or UCD feature. An optional OGM/FAX Detection Card is required to program the OGM.
The following are some examples of OGM and flow chart.

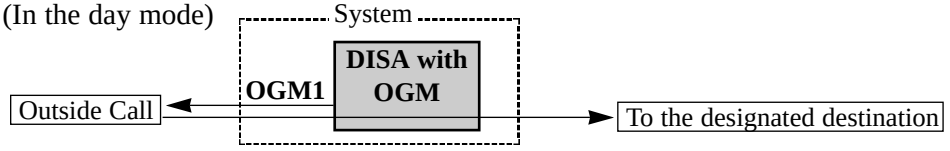
Case 1: Receives 2 calls at a time – OGM for DISA.
(Do not want customers to be kept waiting.)



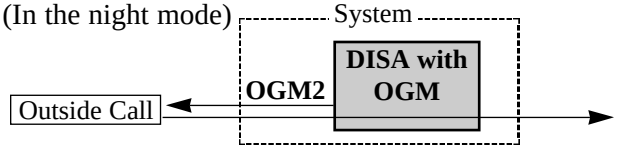
OGM1: "This is A company. For the sales division, press 1. For the service division, press 2. To call the operator, press 0."
OGM2: Same as OGM 1
Required Settings: [502] "MODE1"
[414]-[416] "DISA1"

Case 2: Uses the OGM in the day, night and lunch modes – OGM for DISA.

(In the day mode)



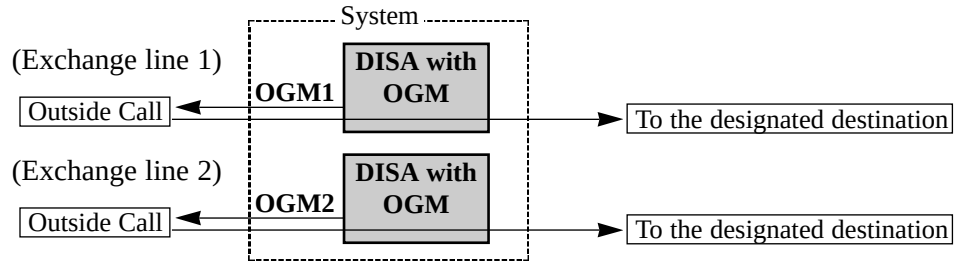
(In the night mode)



The call is disconnected by assigning "Disconnect" for DISA2 in program [510] "DISA No Dial Mode".

OGM1: "This is A company. For the sales division, press 1. For the service division, press 2. To call the operator, press 0."
OGM2: "We are sorry but our office is closed for the day."
Required Settings: [502] "MODE2"
[414]-[416] "DISA1" for OGM1, "DISA2" for OGM2

Case 3: Uses a different OGM for exchange lines – OGM for DISA.

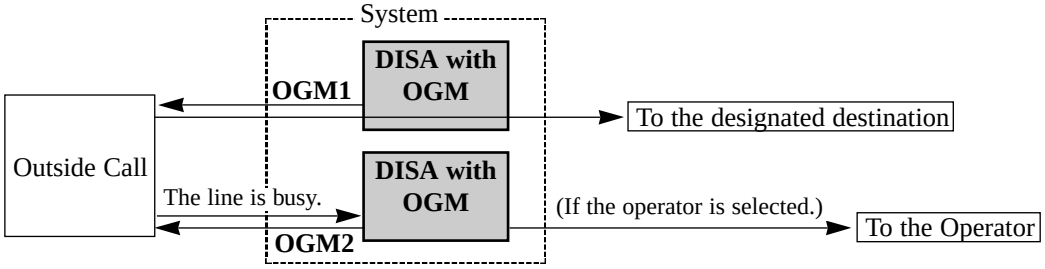


OGM1: "This is A company. For the sales division, press 1. For the service division, press 2. To call the operator, press 0."

OGM2: "This is B company. To contact Mr. A, press 101. To contact Mr. B, press 102."

Required Settings: [502] "MODE2"
[414]-[416] "DISA1" for the A company exchange line(s).
"DISA2" for the B company exchange line(s).

Case 4: Uses a different OGM when the line is busy – OGM for DISA.

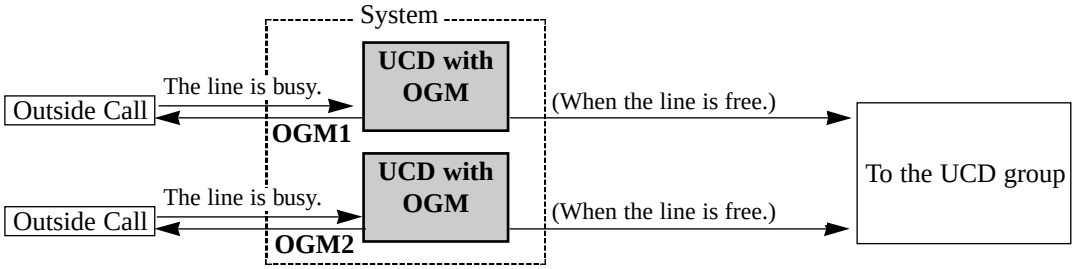


OGM1: "This is A company. For the sales division, press 1. For the service division, press 2. To call the operator, press 0."

OGM2: "We are sorry. The line is currently busy. If you want to call the operator, press 0."

Required Settings: [502] "MODE2"
[414]-[416] "DISA1"
[506] "DISA2"

Case 5: Distributes calls to the UCD group – OGM for UCD.

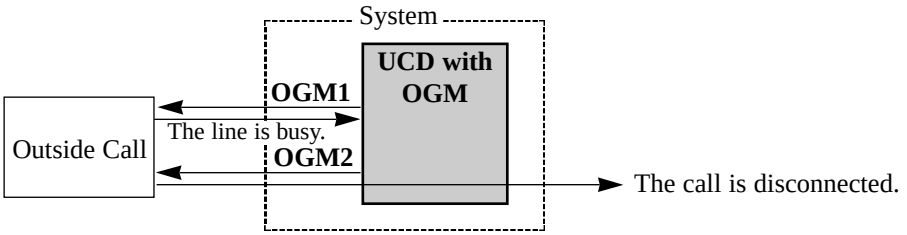


OGM1: "We are sorry. The line is currently busy. Please hold."

OGM2: Same as OGM1

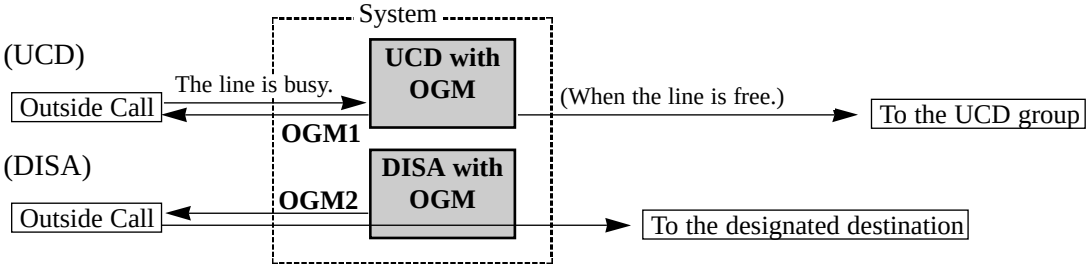
Required Settings: [502] "MODE3"
[414]-[416] "UCD"

Case 6: Disconnects a call after the OGM – OGM for UCD.



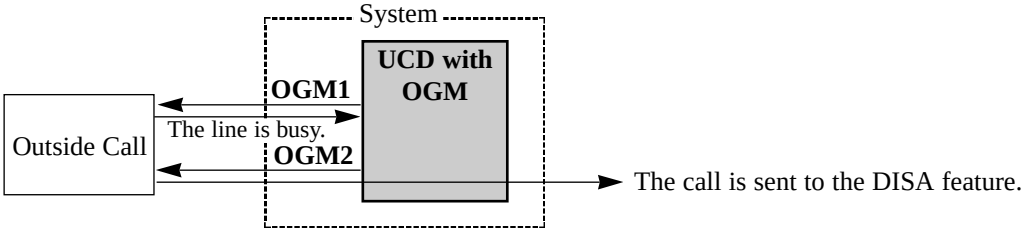
OGM1: "We are sorry. The line is currently busy. Please hold."
OGM2: "We are sorry. The line is currently busy. Please call back later."
Required Settings: [502] "MODE4"
[414]-[416] "UCD"

Case 7: Uses the DISA or UCD feature for exchange lines – OGM for DISA and UCD.



OGM1: "We are sorry. The line is currently busy Please hold." (UCD message)
OGM2: "This is A company. For the sales division, press 1. For the service division, press 2. To call the operator, press 0." (DISA message)
Required Settings: [502] "MODE5"
[414]-[416] "DISA1" for exchange line(s) which use the DISA feature
"UCD" for exchange line(s) which use the UCD feature

Case 8: Uses the DISA feature when none of the extension in the UCD group can answer a call – OGM for UCD.



OGM1: "We are sorry. The line is currently busy Please hold."
OGM2: "This is A company. For the sales division, press 1. For the service division, press 2. To call the operator, press 0."
Required Settings: [502] "MODE6"
[414]-[416] "UCD"
[523] "Intercept"

- An optional OGM/FAX Detection Card is required to program the OGM.

- **Connection Reference**
  2.15 OGM/FAX Detection Card Installation
- **Required System Programming**
  [414]–[416] Exchange Line Mode — Day/Night/Lunch
  [502] OGM Mode Selection
  [506] DISA Busy Mode
  [523] UCD Busy Mode
- **Related Feature References**
  Direct Inward System Access (DISA), Uniform Call Distribution (UCD)
- **Operating Instructions Reference**
  1.8 Operator / Manager Service Features, “Outgoing Message (OGM)”

Outside Calling

Allows an extension user to make a call to an external party by using one of the following line access methods.

<Automatic Line Access>

Allows an extension user to select an available exchange line automatically from the assigned lines in program [419] by pressing the Automatic Line Access number (0 or 9). For a proprietary telephone, a Line Access Key assignment (S-CO, G-CO, O-CO) in the Proprietary Telephone Settings is required. If Idle Line Preference is set on the telephone in the Proprietary Telephone Settings, the user can access an idle line only by going off-hook.

<Individual Line Access>

Allows a proprietary telephone user to select the desired exchange line by pressing the line key assigned as the S-CO key. A Line Access Key assignment (S-CO) is required before use.

<Trunk Group Access>

Allows an extension user to select an idle line within a designated trunk group. A trunk group is assigned in program [404]. To specify a trunk group, dial the feature number "8" and the desired trunk group number (1 through 6). A proprietary telephone user can also specify a trunk group by pressing a G-CO key. A Line Access Key assignment (G-CO) is required before use. If Idle Line Preference is set on the telephone in the Proprietary Telephone Settings, the user can access an idle line only by going off-hook.

- Each extension requires System Programming to access exchange lines.
- After an exchange line is seized, the system waits for the assigned time in program [206] before dialling.

- **Required System Programming**
  - [206] Dialling Start Time
  - [400] Exchange Line Connection Assignment
  - [404] Trunk Group Assignment
  - [405]–[407] Flexible Outward Dialling Assignment — Day/Night/Lunch
  - [419] Automatic Designated Exchange Line Access
- **Related Feature References**
  - Automatic Exchange Line Access Number
  - Preferred Line Assignment — Outgoing, Line Access Keys
- **Operating Instructions References**
  - 1.2 Proprietary Telephone Settings, "Customising Your Telephone Functions", Preferred Line Assignment — Outgoing
  - 1.2 Proprietary Telephone Settings, "Customising the Buttons on Your Telephone", Line Access Keys
  - 1.3 Making Calls, "Outside Calling"

Paging

Allows an extension user to make a voice announcement to several people at the same time. The message is announced over the built-in speakers of proprietary telephones and/or the external pager. The paged person can answer the page (Answering a Page) from any extension within the system. The following types are available.

All Extensions:	Makes a voice announcement to all extensions over the built-in speakers of proprietary telephones.
Group:	Makes a voice announcement to the designated extension group over the built-in speakers of proprietary telephones. An extension group is assigned in program [600] “Extension Group Assignment”.
External:	Makes a voice announcement over the external pager.
All Extensions & External :	Makes a voice announcement to all extensions over the built-in speakers of proprietary telephones and the external pager.

- An extension user can also transfer a call after paging (Paging and Transfer). Also, pages can be denied (Paging Deny).
- An external pager (user-supplied) must be connected beforehand. One external pager can be connected to the system.
- A confirmation tone is sent to the extensions before the voice announcement or answering.
- A confirmation tone is sent to the external pager before the voice announcement. The tone to the external pager can be disabled in program [106].
- An extension which has set the Do Not Disturb (DND) or Paging Deny feature, or is in use cannot be paged.

- **Connection Reference**
  2.9 External Pager (Paging Equipment) Connection
- **Required System Programming**
  [106] External Paging Access Tone
- **Related Feature References**
  Extension Group, Do Not Disturb (DND)
- **Operating Instructions Reference**
  1.5 During a Conversation, “Paging”

Parallelled Telephone Connection

Any analogue proprietary telephone can be connected in parallel with a single line device, such as a single line telephone, facsimile and data terminal.

- System Programming is required.

- **Connection Reference**
  2.11 Parallelled Telephone Connection
- **Required System Programming**
  [610] Parallelled Telephone Connection
- **Related Feature Reference**
  Power Failure Transfer
- **Operating Instructions Reference**
  1.7 Useful Features, “Parallel Connection of a Proprietary Telephone and Single Line Telephone (Parallelled Telephone Connection)”

Personal Speed Dialling

Allows an extension user to store up to 10 speed dialling numbers (0 through 9) with a maximum of 24 digits per number. An extension number, telephone number or feature number can be stored. For example, storing extension numbers for each room in a house can be useful. (1 = Living Room, 2 = Kitchen, etc.) To make a call, dial # and the number.

- Proprietary telephone users cannot use this feature if One-Touch Dialling buttons are assigned to PF buttons. If the user assign a personal speed dialling number, the number stored in the One-Touch Dialling button will be overwritten and vice versa. PF Buttons F1 through F10 correspond to the speed dialling numbers as follows.

F1 — 0	F6 — 5
F2 — 1	F7 — 6
F3 — 2	F8 — 7
F4 — 3	F9 — 8
F5 — 4	F10 — 9

- A rotary telephone user cannot use this feature.

- **Operating Instructions References**
  1.3 Making Call, “Dialling with Personal Speed Dialling (Personal Speed Dialling)”

Pickup Dialling

Allows a single line telephone user to make an outgoing call by going off-hook, if the user has stored the telephone number (up to 32 digits) beforehand. This feature is also known as Hot Line.

- A rotary telephone cannot program this feature.
- The user can set and cancel this feature.
- If the feature is activated and the user goes off-hook, a dial tone will be generated for the delay time assigned in program [203] and then dialling will start. During the delay time, the user can dial another party overriding the Pickup Dialling function.

- **Required System Programming**
  [203] Pickup Dial Delay Time
- **Operating Instructions Reference**
  1.3 Making Call, “Dialling by Simply Going Off-Hook (Pickup Dialling)”

Polarity Reverse Detection

The circuit in the system can detect an exchange line polarity reverse signal from the Local Exchange when trying to make an outside call. This detects the start (a called party goes off-hook) and end (the called party goes on-hook) of an outgoing outside call. The conversation time can be verified on the SMDR printout using this feature.
When an outside call is received, the circuit can also detect the polarity reverse signal before ringing.

- **Required System Programming**
  [424] Reverse (Polarity) Circuit Assignment
- **Related Feature Reference**
  Station Message Detail Recording (SMDR)

Power Failure Transfer

During a power failure, specific extension telephones are automatically connected to specific exchange lines. This provides exchange line conversations between the following extensions and exchange lines.

Exchange line 1 : extension port 01
Exchange line 4 : extension port 09

A single line telephone (SLT) can work in case of a power failure. Connect an SLT to the above extension port. For more information, refer to the Operating Instructions.

- All other conversations, except the above combinations, are disconnected during a power failure.
- Only an exchange line can have a conversation. All other features do not work.
- We recommend connecting a single line telephone (SLT) in parallel at extension ports 01 and 09, so that an SLT can be used during a power failure.

- **Connection Reference**
  2.18 Auxiliary Connection for Power Failure Transfer
- **Related Feature Reference**
  Parallelled Telephone Connection
- **Operating Instructions Reference**
  1.7 Useful Features, “Power Failure Transfer”

Preferred Line Assignment — Incoming

A proprietary telephone user can select the method to answer incoming outside calls from the following 3 line preferences. System Programming and Proprietary Telephone Settings are required.

No Line Preference: When an incoming call is received, the extension user must go off-hook and then press the flashing line key.

Prime Line Preference: When incoming calls are received at the same time, the user can receive the call on the preferred exchange line by only going off-hook.

Ringing Line Preference: When an incoming call is received, the user can receive the call ringing at their telephone by going off-hook.

- A single line telephone can only set “Ringing Line Preference”.
- Line access key(s) (Single Exchange Line, Other Exchange Line or Trunk Group) should be assigned to line key(s) beforehand.

- **Required System Programming**
  [408]–[410] Flexible Ringing Assignment — Day/Night/Lunch
  [411]–[413] Delayed Ringing Assignment — Day/Night/Lunch
- **Related Feature Reference**
  Line Access Keys
- **Operating Instructions References**
  1.2 Proprietary Telephone Settings, “Customising Your Telephone Functions”, Preferred Line Assignment — Incoming
  1.2 Proprietary Telephone Settings, “Customising the Buttons on Your Telephone”, Line Access Keys

Preferred Line Assignment — Outgoing

A proprietary telephone user can select a desired outgoing line preference to make outside calls from the following 3 line preferences. System Programming and Proprietary Telephone Settings are required.

Idle Line Preference: When the user goes off-hook, they are connected to an idle line. An idle line is automatically selected from the pre-assigned lines in program [419].

Prime Line Preference: When the user goes off-hook, they are connected to the pre-assigned line. Assign one prime line beforehand.

No Line Preference: No line is selected when the user goes off-hook. They must select a line to make a call.

- Line Access Key(s) (Single Exchange Line, Other Exchange Line or Trunk Group) should be assigned to the line key(s) beforehand.

- **Required System Programming**
  [400] Exchange Line Connection Assignment
  [405]–[407] Flexible Outward Dialling Assignment — Day/Night/Lunch
  [419] Automatic Designated Exchange Line Access
- **Related Feature Reference**
  Line Access Keys
- **Operating Instructions References**
  1.2 Proprietary Telephone Settings, “Customising Your Telephone Functions”, Preferred Line Assignment — Outgoing
  1.2 Proprietary Telephone Settings, “Customising the Buttons on Your Telephone”, Line Access Keys

Proprietary Telephone Setting Data Default Set

Allows a proprietary telephone user to reset the following Proprietary Telephone Settings to the default settings.

- Preferred Line Assignment — Outgoing
- Preferred Line Assignment — Incoming
- Exchange Line Ringing Selection
- Intercom Alert Assignment
- Call Waiting Tone Selection

- **Operating Instructions Reference**
  1.2 Proprietary Telephone Settings, “Customising Your Telephone Functions”, Proprietary Telephone Setting Data Default Set

Pulse to Tone Conversion

Allows an extension user to change the dialling mode from Pulse to Tone after entering a telephone number to access services, such as computer telephone services or Voice Mail, which require tones.

- This feature only works for exchange lines which have set “Pulse Mode” or ”Call Blocking Mode” in program [401].
- Changing from Tone to Pulse is not possible.

- **Required System Programming**
  [401] Dial Mode
- **Operating Instructions Reference**
  1.7 Useful Features, “Pulse to Tone Conversion”

Recall

The RECALL button is used to allow a proprietary telephone user to disconnect the current call and originate another call without hanging up. This is activated when “MODE2” is selected in program [110] and the RECALL button is pressed for longer than the time programmed in [418]. When “MODE1” is selected in program [110], the RECALL button can be used to access features of the Local Exchange or host PBX (External Feature Access). It is performed by putting the current party on hold and sending a recall signal while having an outside call.

- Assigning the External Feature Access feature to any flexible button is useful when “MODE 2” was selected in program [110]. This can be done from any extension by assigning the RECALL button to a One-Touch Dialling button (☞ Operating Instructions, 1.2 Proprietary Telephone Settings, “Customising the Buttons on Your Telephone”, One-Touch Access for System Features). When the assigned button is pressed, a recall signal is sent during the programmed time in [418].

- **Required System Program Address**
  [110] Recall Key Mode
  [418] Recall Time
- **Operating Instructions Reference**
  1.7 Useful Features, “External Feature Access”

Recall Button on a Single Line Telephone

Pressing the Recall button is used to allow a single line telephone user to hold a call for transferring or holding, if the recall time is within the assigned time in program [207]. The procedure to transfer a call or hold is determined in program [104] “Hold Mode Selection”. Pressing the Recall button can be also used to disconnect a call, if the recall time is more than the assigned time in program [207].

- If “MODE 1” was selected in program [207], the system will recognise pressing the Recall button as hooking, while a busy tone or reorder tone is sent or during a conversation. The system will recognise as 1 being dialled in the pulse mode, while a dial tone is sent. The system can refuse receiving a pulse signal by selecting “Disable” in program [614]. Therefore, even if the Recall button is pressed during a dial tone, the system will regard it as hooking.

- **Required System Programming**
  [207] Recall Timing Range Selection
  [614] Internal Pulse Detection

Receiving Calls

Allows an extension user to receive an intercom or outside call by going off-hook. A proprietary telephone user can also receive a call by pressing the rapid flashing CO or INTERCOM button, and talk (handsfree mode) if the telephone has the SP-PHONE button.

- A proprietary telephone user can select the Line Preference for incoming outside calls. See “Preferred Line Assignment — Incoming” in this section.

- **Required System Programming**
  [408]–[410] “Flexible Ringing Assignment — Day/Night/Lunch”
  [411]–[413] “Delayed Ringing Assignment — Day/Night/Lunch”
- **Related Feature Reference**
  Preferred Line Assignment — Incoming
- **Operating Instructions Reference**
  1.4 Receiving Calls, “Receiving Calls”

Redial

<Last Number Redial>

Every extension automatically saves the last telephone number dialled so that the extension user can make a call to the same party later using a simple operation.

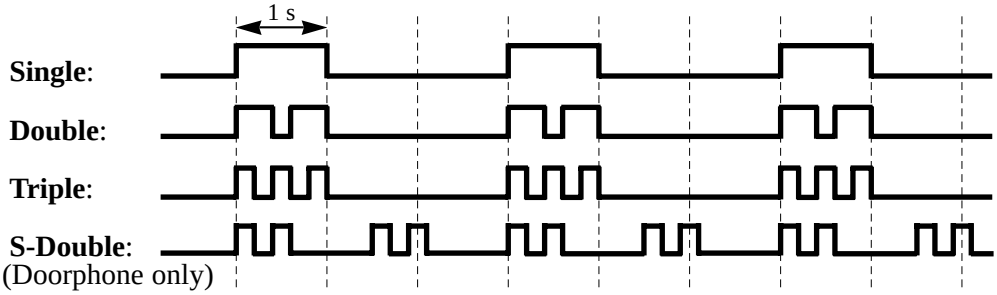
<Saved Number Redial>

Allows a proprietary telephone user to save the current external telephone number in the SAVE button during a conversation, so that the extension user can redial the same party later using a simple operation. The saved number can be redialled until another number is stored. A flexible button can be assigned as the SAVE button in the Proprietary Telephone Settings.

- **Operating Instructions References**
  - 1.2 Proprietary Telephone Settings, “Customising the Buttons on Your Telephone”, SAVE button
  - 1.3 Making Calls, “Redialling the Last Number Dialled (Last Number Redial)”
  - 1.3 Making Calls, “Redialling the Saved Number (Saved Number Redial)”

Ringing Pattern Selection

A ringing pattern can be selected depending on the type of call such as an outside call, intercom call and doorphone call. Available ringing patterns are as follows:



- Private calls can be distinguished from business calls by assigning different ringing per exchange line. Moreover, by assigning different ringing, intercom calls and doorphone calls can be distinguished from other calls. Therefore, careful attention should be applied to all ringing assignments.

- **Required System Programming**
  - [115] Extension Ringing Pattern Selection
  - [423] Exchange Line Ringing Pattern Selection
  - [706] Doorphone Ringing/Tone Pattern Selection
- **Related Feature Reference**
  - Exchange Line Ringing Selection

Room Monitor

Allows a proprietary telephone or single line telephone with a MUTE button to monitor a room or the front door through another proprietary telephone or doorphone without them knowing. The access tone will not be sent to the monitored proprietary telephone when monitoring starts.

- The extensions that can be monitored must be programmed in [612] before operation is possible.
- If a doorphone is used as a room monitor, the access tone will be heard when monitoring starts as the default setting. The tone can be disabled in program [707].
- This feature is not available for KX-T7050.
- A single line telephone with a MUTE button can be used for monitoring, but cannot be monitored.

- **Required System Programming**
  [612] Room Monitor Assignment
  [707] Doorphone Access Tone Selection
- **Related Feature Reference**
  Doorphone Call
- **Operating Instructions Reference**
  1.7 Useful Features, “Room Monitor”

Secret Dialling

Allows a proprietary telephone user to conceal all or part(s) of a System Speed Dialling number assigned in program [001] or One-Touch Dialling number assigned to a flexible button in the Proprietary Telephone Settings which would normally appear on the display.

- When storing a number, press the INTERCOM button at the beginning and the end of the numbers to be concealed.
- One or more parts of a telephone number can be concealed.
- Printing out the concealed number on a SMDR can be assigned in program [803].

- **Required System Programming**
  [001] System Speed Dialling Entry
  [803] Secret Speed Dialling/One-Touch Dialling Printing
- **Related Feature References**
  One-Touch Dialling, System Speed Dialling
- **Operating Instructions References**
  1.2 Proprietary Telephone Settings, “Customising the Buttons on Your Telephone”, One-Touch Dialling Button
  1.7 Useful Features, “Secret Dialling”

Self-Extension Number Confirmation (KX-T7130 only)

Allows a display proprietary telephone user to confirm their port and extension number using a simple operation.

- **Operating Instructions Reference**
  1.7 Useful Features, “Self-Extension Number Confirmation (KX-T7130 only)”

Station Message Detail Recording (SMDR)

Station Message Detail Recording (SMDR) automatically prints out detailed call information of outside calls. A printer connected to the Serial Interface (RS-232C) port can be used to print incoming and outgoing outside calls, as well as print a hard copy of System Programming. To print out the record of System Programming items that have been assigned, use program [804] "System Data Dump". To print the call records, use program [802] "Incoming/ Outgoing Call Selection for Printing", which prints out the following records.

- A record of all outgoing outside calls or outgoing toll calls
- A record of all incoming outside calls

An example of a printed call record:

Date	Time	Ext.	CO	Dial number	Duration	Code
31/12/98	12:52PM	203	05	123456789012345678901234567890 12	00:00'16	....
31/12/98	12:53PM	203	02	< incoming >	00:01'43	....
31/12/98	*12:54PM	201	02	< incoming >	00:07'48	....
31/12/98	1:04PM	203	06	092...1438	00:00'06	4536
31/12/98	1:04PM	202	05	< DISA incoming >	00:00'09	....
31/12/98	1:05PM	203	01	< DISA incoming >	00:00'08	....
31/12/98	1:06PM	203	01	092123456789	00:00'08	....
31/12/98	1:06PM	202	02	0921234567	00:00'17	....
31/12/98	1:07PM	203	01	0921234567	00:11'00	..13
31/12/98	2:15PM	203	01	0921234567	00:11'00	.201
31/12/98	2:26PM	203	01	F/0927654321	00:03'00	....
31/12/98	2:27PM	216	05	9=0924567123	00:13'55	....
31/12/98	3:25PM		02	< UCD Waiting >	00:11'48	....

Example of the SMDR printout format:

Explanation

(1) Date : shows the date of the call as Day/Month/Year.

(2) Time : shows the time the call was started as Hour: Minute/AM or PM.
"*" indicates a transferred call.

(3) Ext. : shows the extension number, etc. that engaged in the call.

(4) CO : shows the exchange line number used for the call.

(5) Dial number

Outgoing call: Shows the called party's telephone number (maximum 32 digits). Valid digits are 0 through 9, #, * and P (if the PAUSE button was pressed).

Received call: Shows <incoming>. An incoming call via the DISA feature is shown as <DISA incoming>, via the DIL feature is shown as <DIL incoming>.

UCD waiting call: Shows <UCD waiting> for an incoming call via the UCD feature. When the "UCD waiting call" is answered, it becomes a "Received call" and a new record is started.

(6) Duration : shows the duration of the call or the UCD call waiting time in Hours/Minutes/Seconds.

(7) Code: shows the account code appended to the call, account code index number (e.g.: 13) or the extension number which uses the Walking COS feature (e.g.: 201).

- This system can store information of up to 64 calls.
- This data is not deleted even when the system is reset.
- If RECALL is manually sent out during a conversation to make another call without hanging up, etc., a call record will be printed and a new record started. "F/" will be printed at the beginning of the dial number on the new record.
- When a host PBX code is entered, "=" will be printed between the code and dialled number.
- The language used for an SMDR printout can be selected in program [806].

- **Connection Reference**
  2.13 Printer and PC Connection
- **Required System Programming**
  [000] Date and Time Setting
  [204] Call Duration Count Start Time
  [800] SMDR RS-232C Communication Parameters
  [801] SMDR Parameter
  [802] Incoming/Outgoing Call Selection for Printing
  [803] Secret Speed Dialling/One-Touch Dialling Printing
  [804] System Data Dump
  [805] SMDR Account Code Selection
  [806] SMDR Language Assignment
- **Related Feature Reference**
  Language Selection

System Data Default Set

This system can re-initialise the system-programmed data. If all the programmed data is cleared, the system will reset using the default settings by program [999].

- The default setting for each programming item is listed in Section 5.1, Default Values.

- **Required System Programming**
  [999] System Data Clear
- **Installation Reference**
  2.23 System Data Clear

System Speed Dialling

The system supports 100 System Speed Dial numbers (up to 32 digits) assigned in program [001] that are available to all extension users. A System Speed Dial number is dialled out using a simple operation.

Each System Speed Dial number can be assigned a name in program [011]. The assigned name will be displayed when making a call by using the System Speed Dialling feature. It will also be displayed when an external caller's telephone number matches one of System Speed Dialling numbers and the Telephone Company does not provide the caller's name.

- Call Barring for System Speed Dialling can be assigned by program [301].
- A rotary telephone user cannot use this feature.

- **Required System Programming**
  [001] System Speed Dialling Entry
  [011] System Speed Dialling Name Setting
  [301] Call Barring – System Speed Dialling Boundary Class
- **Related Feature**
  Call Barring for System Speed Dialling
- **Operating Instructions for the Caller ID Card References**
  Section 1.2, System Features
  Caller ID
- **Operating Instructions Reference**
  1.3 Making Calls, "Dialling with System Speed Dialling (System Speed Dialling)"

Timed Reminder

<Timed Reminder>

Allows an extension user to generate an alarm tone at a preset time as a wake-up alarm or a reminder. The user can set this to be activated once or everyday.

<Timed Reminder, Remote (Wake-Up Call)>

The operator or manager can remotely set, cancel and confirm the Timed Reminder of the desired extension. For example, this is useful for a small hotel or motel to set an extension in a guest room as a wake-up call, or set an extension in a child's room by a mother.

- **Operating Instructions References**
  1.7 Useful Features, "Alarm Setting (Timed Reminder)"
  1.8 Operator / Manager Service Features, "Timed Reminder, Remote (Wake-Up Call)"

Time (Day/Night/Lunch) Service

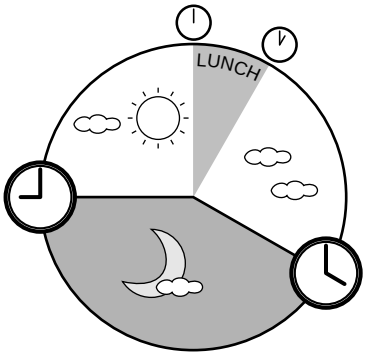
The system supports the day, night and lunch operation modes. The system operation for making and receiving calls can be different for the day, night and lunch modes. The system operation for call barring can be arranged to prevent unauthorised toll calls for each mode. Time service can be set automatically or manually by program [006].

Changing the Day/Night/Lunch Modes

The day, night and lunch modes can be changed either automatically at an assigned time in program [007] or manually by the operator or manager at any desired time.

- The lunch mode interrupts the day or night mode. After the lunch mode is finished, the day or night mode starts again.
- If the lunch mode is set using feature number “783#” in the automatic mode, the mode can only be cancelled by using feature number “780#”. This can be useful during holidays. The day and night modes are automatically changed at the programmed time in [007] even if feature number “780#” is not entered. These operations can only be done by an operator or manager.
- The operator and manager can see the status of the mode (day, night or lunch) by the pre-assigned DSS buttons’ LED on the DSS console. Time service can be changed easily by pressing the pre-assigned DSS buttons.
- The following programming items will be affected by the time service.

  [405]-[407] Flexible Outward Dialling Assignment — Day/Night/Lunch
  [408]-[410] Flexible Ringing Assignment — Day/Night/Lunch
  [411]-[413] Delayed Ringing Assignment — Day/Night/Lunch
  [414]-[416] Exchange Line Mode — Day/Night/Lunch
  [601]-[603] Call Barring – Class of Service Assignment — Day/Night/Lunch
  [700]-[702] Doorphone Ringing Assignment — Day/Night/Lunch
  [703]-[705] Door Opener Assignment — Day/Night/Lunch



- **Required System Programming**
  [006] Time (Day/Night/Lunch) Service Changing Mode
  [007] Time (Day/Night/Lunch) Service Start Time
- **Operating Instructions References**
  1.8 Operator / Manager Service Features, “Time (Day/Night/Lunch) Service Setting”
  1.9 DSS Console Features, “Initial Settings”, Day, Night and Lunch Buttons Assignment

Uniform Call Distribution (UCD)

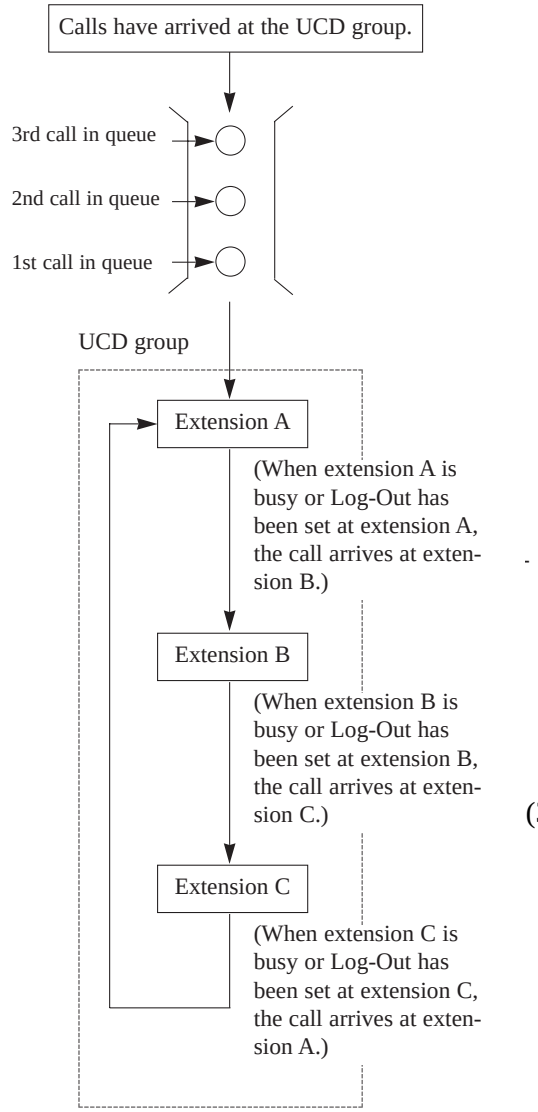
Distributes incoming calls to one specific extension group called a UCD group assigned in program [520]. Calls to the UCD group hunt for an idle extension in numerical order. The UCD feature is particularly helpful when a certain extension receives a high volume of calls compared with other extensions.

- An optional OGM/FAX Detection Card is required to perform the UCD feature.
- The Log-In or Log-Out status can be set on an extension basis. There should be at least one extension that is in Log -In status in the UCD group.
- An extension which sets the Call Forwarding–All, –Busy or No Answer, or the Do Not Disturb (DND) feature is skipped during circular calling.
- When all extensions in the UCD group are busy, a busy message is heard and then Music on Hold is activated. If any extension in the UCD group is not available within the programmed time period, then (1) an OGM will be heard and the call is disconnected, or (2) the call will be sent to pre-programmed extension(s) in [408]-[410]. System Programming is required for this operation. Refer to the “Flow chart of possible cases and results for UCD calls”.

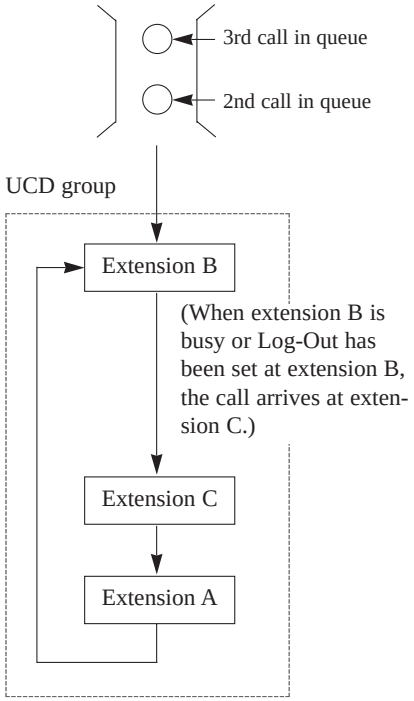
- **Connection Reference**
  2.15 OGM/FAX Detection Card Installation
- **Required System Programming**
  [111] Hold Music Selection
  [408]-[410] Flexible Ringing Assignment – Day/Night/Lunch
  [414]–[416] Exchange Line Mode — Day/Night/Lunch
  [502] OGM Mode Selection
  [513] Cyclic Tone Detection
  [520] UCD Group
  [521] UCD Busy Waiting Time
  [522] UCD OGM Message Interval Time
  [523] UCD Busy Mode
  [524] UCD Intercept Mode
  [525] UCD Ringing Time before Intercept
  [526] UCD Ringing Time after Intercept
  [600] Extension Group Assignment
- **Related Feature References**
  Call Forwarding, Do Not Disturb (DND), Extension Group, Log-In/Log-Out

Outline of a UCD

(1) When a number of calls have arrived at the UCD group, the first call arrives at extension A first.

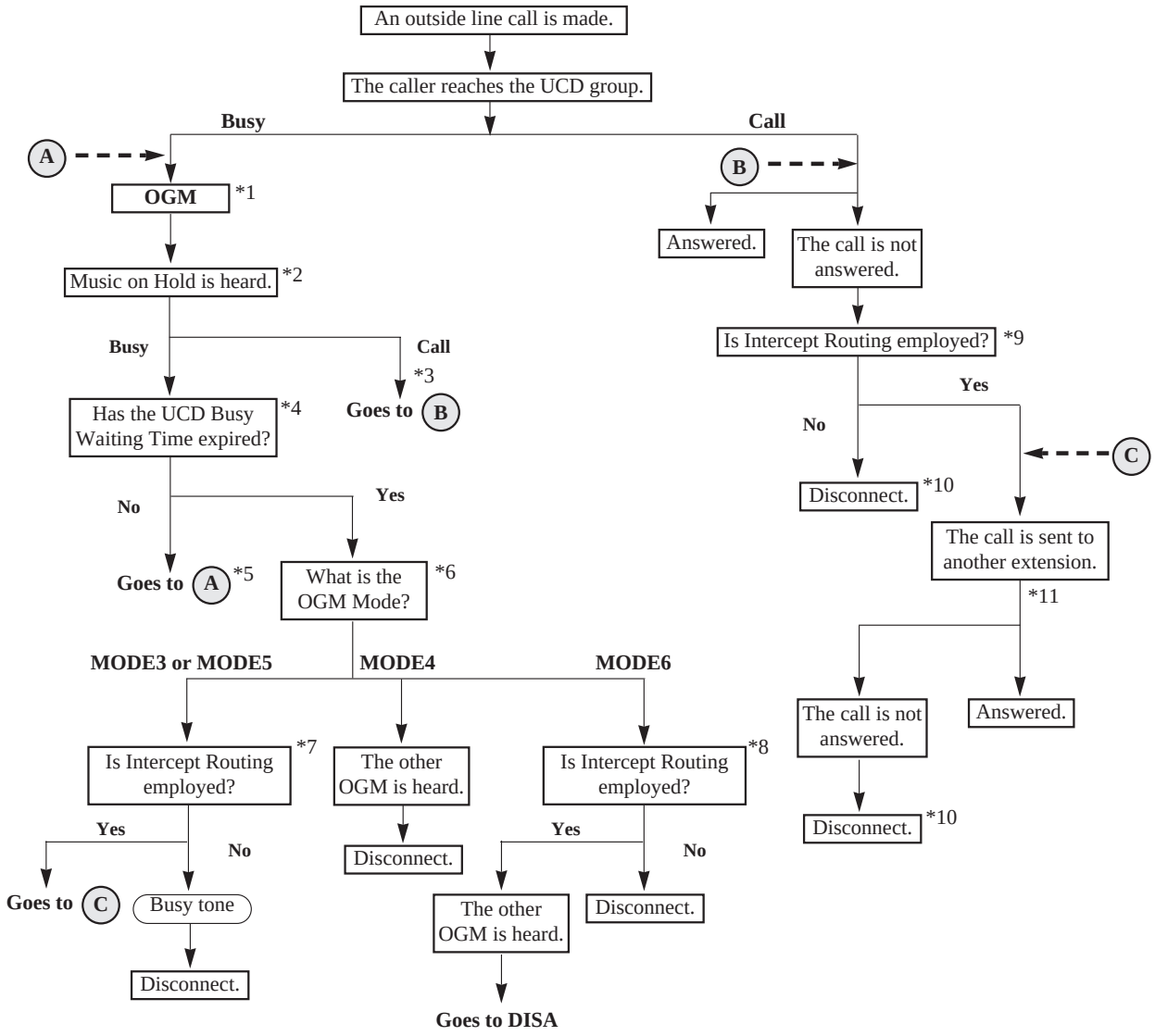

Calls have arrived at the UCD group.
3rd call in queue
2nd call in queue
1st call in queue
UCD group
Extension A
(When extension A is busy or Log-Out has been set at extension A, the call arrives at extension B.)
Extension B
(When extension B is busy or Log-Out has been set at extension B, the call arrives at extension C.)
Extension C
(When extension C is busy or Log-Out has been set at extension C, the call arrives at extension A.)

(2) When the first call arrives at extension A, the second call arrives at extension B.


3rd call in queue
2nd call in queue
UCD group
Extension B
(When extension B is busy or Log-Out has been set at extension B, the call arrives at extension C.)
Extension C
Extension A

(3) When the second call arrives at extension B, the third call will arrive at extension C.

Flow chart of possible cases and results for UCD calls



Note: The explanation for *1 through *11 is on the next page.

*1: An OGM is sent to the caller.
When the system detects a cyclic tone or CPC signal while the OGM is being sent, the call is disconnected.

*2: Music on hold is selected in program [111] as follows.
• **External** – Uses an external music source, such as a radio.
• **Tone** – Uses the cyclic tone equipped with the system.

*3: When an extension in the UCD group is available.

*4: The system holds the call until the assigned time in program [521] expires.

*5: OGM repeats the assigned time intervals in program [522] within the assigned time in program [521].

*6: The OGM Mode is selected in program [502].

*7: The system treats the call according to program [523] as follows when the assigned time in [521] expires.
• **Disconnect** – The call is disconnected.
• **Intercept** – The call is sent to the extensions programmed in [408]-[410].

*8: The system treats the call according to program [523] as follows when the assigned time in [521] expires.
• **Disconnect** – The call is disconnected.
• **Intercept** – The other OGM leads the caller to the DISA feature (☞ "Direct Inward System Access (DISA)" in this section).

*9: The system treats the call according to program [524] as follows when the assigned time in [525] expires.
• **Disconnect** – The call is disconnected.
• **Intercept** – The call is sent to the extensions programmed in [408]-[410].

*10: If the caller did not hear an OGM, the call will not be disconnected until the caller goes on-hook.

*11: The UCD Ring Timer after Intercept starts. The destination telephone(s) will ring for the time programmed in program [526]. If the call is not answered during the programmed time, the call will be disconnected.

Voice Mail Integration for KX-TVP100

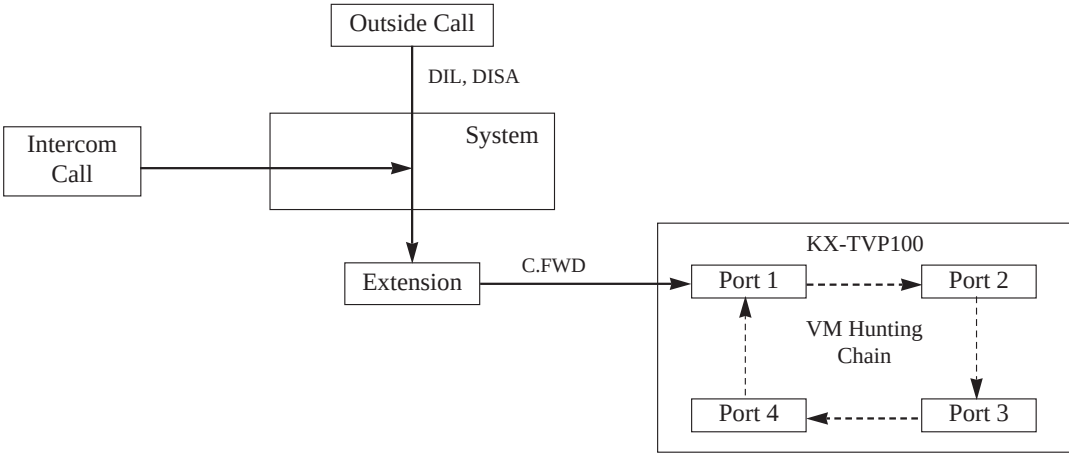
This system supports Panasonic Voice Processing System (VPS) equipment (KX-TVP100) by sending DTMF tones described in program [103]. The DTMF tones sent to a VPS indicate the state of a call (busy, answered, ringing, disconnected, etc.). The DTMF tones also inform a VPS of the destination of a call transferred to the VPS by the Call Forwarding or DISA Intercept Routing – No Answer feature. Up to 4 VPSs can be connected to the extension ports as extensions in the system.

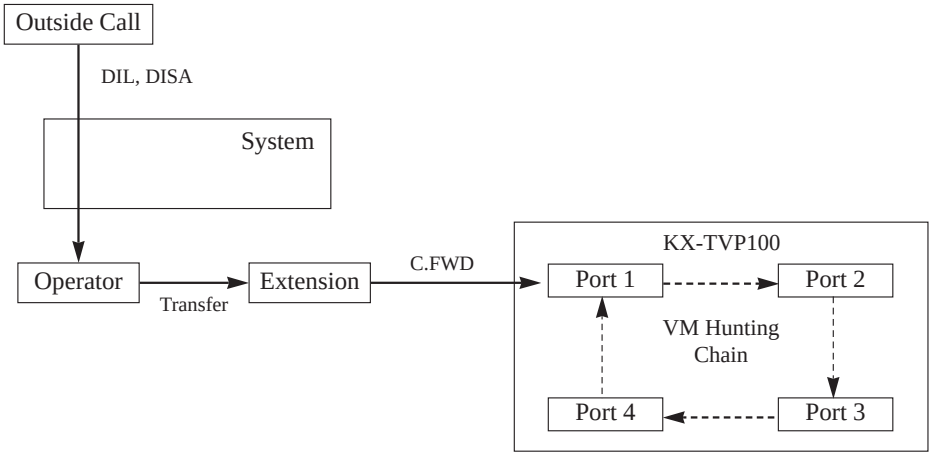
System Explanation

1. Voice Mail Service

1.1 Call Forwarding to VM

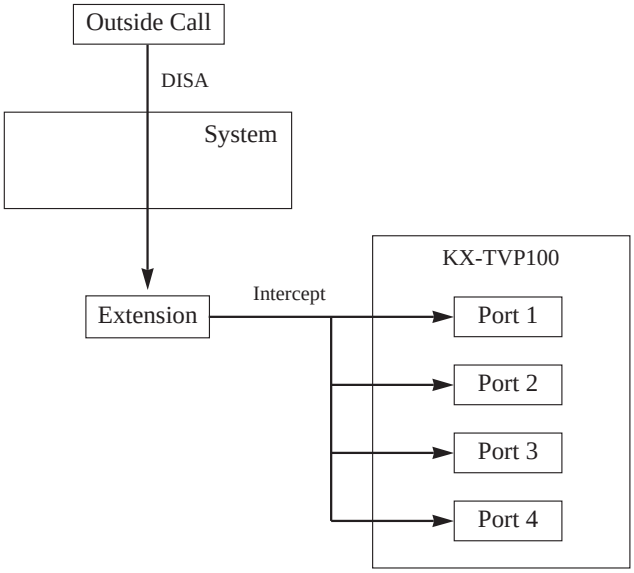
If an extension user sets Call Forwarding (C. FWD) whose destination is the VPS, an incoming call is forwarded to the VPS. The system sends the VPS the extension mailbox number at that time. Therefore, the calling party can leave their message in the mailbox of the desired extension without having to know the mailbox number.





1.2 DISA Intercept to VM

If the VPS is set as the Intercept destination of an exchange line, an outside call is forwarded to the VPS. The system sends the VPS the extension mailbox number at that time. Therefore, the calling party can leave their message in the mailbox of the desired extension without having to know the mailbox number. If a DISA call is transferred to the VPS by Intercept Routing from a DISA ring group, your system will transmit the mailbox number of the lowest port number of the DISA ring group. Delayed Ringing must be assigned to VPS extensions in programs [411]-[413].



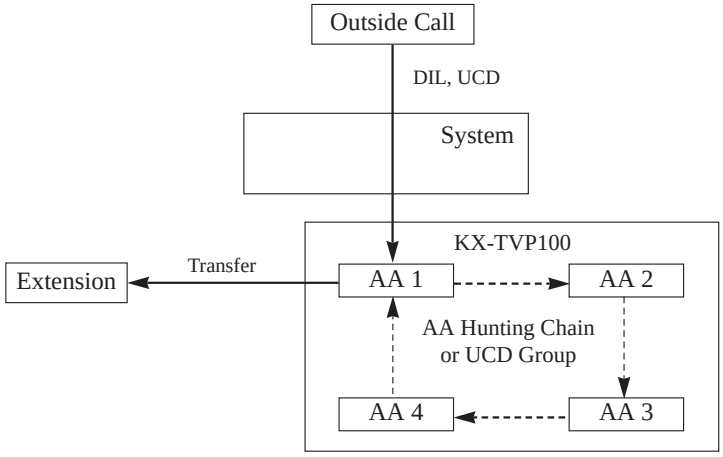
1.3 Listening to a Recorded Message

If the VPS receives a message, the VPS can turn on the MESSAGE button indicator on the corresponding proprietary telephone to notify to the user. The VPS notifies the extension user that there is a message waiting in their mailbox. When the MESSAGE button indicator is lit, pressing the button allows the extension user to play back the stored message. A single line telephone user hears dial tone 3 (☞ "Distinctive Dial Tones" in this section) when going off-hook if there are messages in their mailbox. They can call the voice mail extension to listen to their messages. In this case, they must listen to all of the messages. Once they access voice mail, dial tone 3 will be eliminated and not be heard next time they go off-hook. Therefore, they will not know even if there are messages left.

2. Automated Attendant (AA) Service

2.1 AA to Extension

AA receives and answers outside calls and offers services such as transferring to an extension or mailbox using DTMF signalling, which is sent from the calling party.



- A VPS can be assigned as the destination for the following features.
  Call Forwarding – All Calls
  Call Forwarding – Busy/No Answer
  DISA Intercept Routing – No Answer
  In these functions, the caller does not need to know the mailbox number of the called extension because the code is automatically transmitted to the VPS.
- The mailbox number is the same as its extension number.
- The Voice Mail extension should set Data Line Security to prevent interference from system signals.
- If KX-TA624 cannot be selected with the PBX type setup menu of the KX-TVP100, select “KX-T1232”. Follow the steps for a KX-T1232.

- **Connection Reference**
  2.8 Extension Connection
- **Required System Programming**
  [009] Extension Number Assignment
  [102] Voice Mail Port for KX-TVP100
  [103] DTMF Integration for KX-TVP100
  [408]-[410] Flexible Ringing Assignment — Day/Night/Lunch
  [411]-[413] Delayed Ringing Assignment — Day/Night/Lunch
  [414]–[416] Exchange Line Mode — Day/Night/Lunch
  [507] DISA Intercept Mode
- **Related Feature References**
  Call Forwarding, Data Line Security, Direct Inward System Access (DISA), Distinctive Dial Tones, Extension Hunting, Intercept Routing
- **Operating Instructions Reference**
  1.7 Useful Features, “Voice Mail Integration for KX-TVP100”

Volume Control

Allows a proprietary telephone user to adjust the following volumes, as necessary, by adjusting the corresponding levers or pressing the corresponding buttons.

- Handset receiver volume
- Ringer volume
- Speaker volume

- **Operating Instructions Reference**
  1.2 Proprietary Telephone Settings, “Volume Control — Handset Receiver/ Ringer/Speaker”

Walking COS

Allows an extension user who is not at their own telephone to override the call barring COS number of another extension by dialling their extension password. For the duration of the call, the COS of the extension is changed to the COS of their own extension.

- If the extension overriding call barring is assigned to “Forced” or “Verify–All”, the user must enter the account code before the line access code.
- When a user makes a call using this feature, the user’s extension number will be displayed on the SMDR, not the extension where the user made the call.

- **Operating Instructions References**
  1.7 Useful Features, “Calling Using Your Privileges at Another Extension (Walking COS)”
  1.8 Operator / Manager Service Features, “Extension Password Set (Manager only)”

Section 4
System Programming

4.1 Before System Programming

NOTE:

System data clear should be performed before System Programming.
(☞ 2.21, Starting the System for the First Time)

Default Setting

This system has factory default settings (☞ 5.1, Default Values). If any of the programming needs to be changed, you can change the setting by System Programming. **Default** shows you the factory default setting. Any required changes can be written in the Programming Tables listed in section 7, Programming Tables.

Required Telephone Set

The following display proprietary telephone is required for System Programming.

- KX-T7130

Connect the telephone to the following.

- Port number 01

Before entering the programming mode

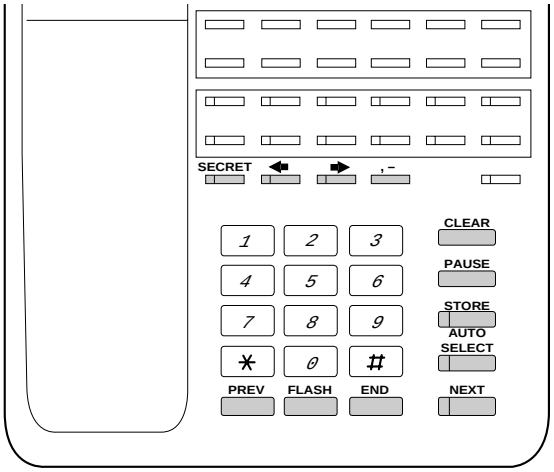
Before entering the programming mode, confirm that:

- Your telephone is on-hook.
- No calls are on hold at your telephone.

Placing the Overlay on a Telephone

A programming overlay is packed with the telephone at the factory. This overlay should be used at all times during programming. The functions of the telephone keys change during programming as shown below.

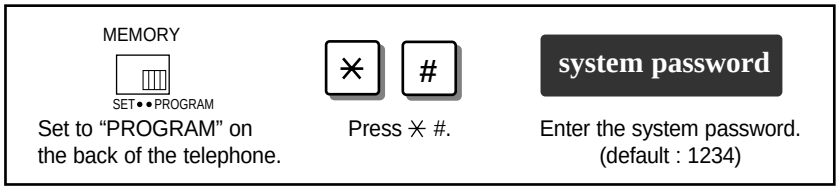
Location of Controls with the Overlay



KX-T7130

4.1 Before System Programming

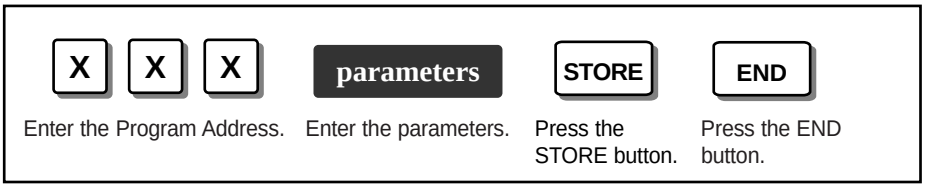
To enter the programming mode



- The system password can be changed by program [002] "System Password".
- During the programming mode, your extension is treated as a busy extension.
- If you enter the wrong system password, you will hear an alarm tone (3 beeps). Try again.

Programming sequence

After entering the programming mode



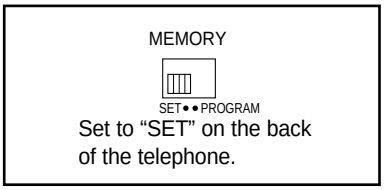
After pressing the STORE button, you will hear one of the following tones.

Confirmation tone (1 beep): This informs you that storing is completed. You can continue programming by entering the same or another program address

(2 beeps): This informs you that the same parameter has already been stored.

Alarm tone (3 beeps): This informs you that the entry is invalid.

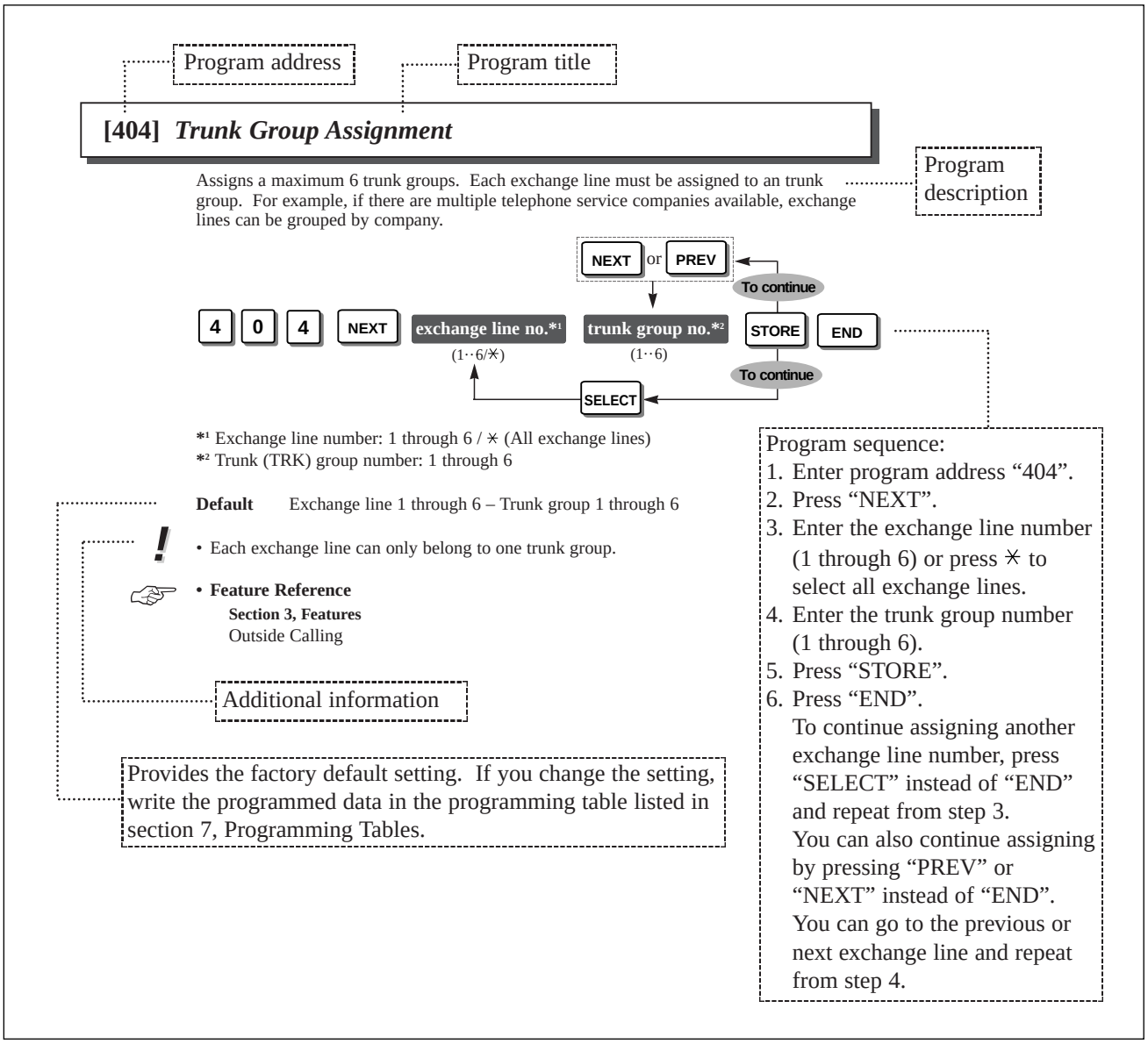
To exit the programming mode



4.1 Before System Programming

Programming example

The following programming instructions assume that you have already entered the programming mode.
Example: Program [404] “Trunk Group Assignment”

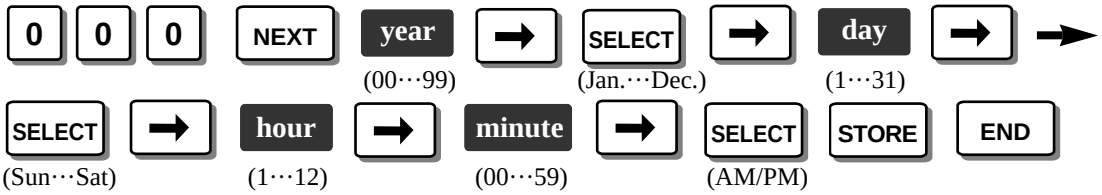

Program address
Program title
[404] Trunk Group Assignment
Assigns a maximum 6 trunk groups. Each exchange line must be assigned to an trunk group. For example, if there are multiple telephone service companies available, exchange lines can be grouped by company.
Program description
NEXT
or
PREV
To continue
4
0
4
NEXT
exchange line no.*1
(1··6/✳)
trunk group no.*2
(1··6)
STORE
END
To continue
SELECT
*1 Exchange line number: 1 through 6 / ✳ (All exchange lines)
*2 Trunk (TRK) group number: 1 through 6
Default Exchange line 1 through 6 – Trunk group 1 through 6
• Each exchange line can only belong to one trunk group.
• Feature Reference
Section 3, Features
Outside Calling
Additional information
Provides the factory default setting. If you change the setting, write the programmed data in the programming table listed in section 7, Programming Tables.
Program sequence:
1. Enter program address “404”.
2. Press “NEXT”.
3. Enter the exchange line number (1 through 6) or press ✳ to select all exchange lines.
4. Enter the trunk group number (1 through 6).
5. Press “STORE”.
6. Press “END”.
To continue assigning another exchange line number, press “SELECT” instead of “END” and repeat from step 3.
You can also continue assigning by pressing “PREV” or “NEXT” instead of “END”.
You can go to the previous or next exchange line and repeat from step 4.

Additional Information

- When you press ✳ , for example in step 3 in program [404], if all exchange lines have been assigned as trunk group 1, “CO ✳ : TRK GRP – 1” will be displayed. If each exchange line has been assigned to a different trunk group, “CO ✳ : Mixed” will be displayed.
- You can press the SELECT button repeatedly to select the desired parameter, if available.
- You can use the → or ← button to move to the next/previous step, if available.

[000] *Date and Time Setting*

Sets the current date and time.



Default '98 Jan. 1 Thu 12:00 AM

- To return to the previous programming step, press ← .
- To correct a wrong entry for the year, day, hour or minute, press the CLEAR button and enter the new one in each step.
- After changing an entry, you can press the STORE button. You do not have to perform the rest of the steps.
- The clock starts immediately after the STORE button is pressed.
- The system supports years from 1998 to 2097.

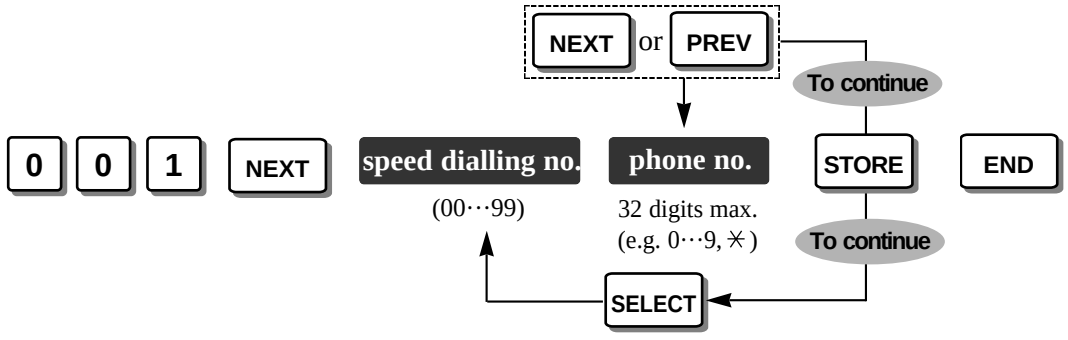
- **Feature References**

  Section 3, Features

  Date and Time Setting, Station Message Detail Recording (SMDR)

[001] *System Speed Dialling Entry*

Assigns a maximum of 100 System Speed Dialling numbers. To delete a stored phone number, press the CLEAR and STORE buttons after entering the Speed Dialling number.



Default Not stored.

- To correct a wrong entry, press the CLEAR button and enter the new one.
- A line access number (9 or 0, 81 through 86) should be included before the phone number.

- Up to 32 digits, consisting of “0 through 9”, “✳,”, “#”, “PAUSE”, “—”,“RECALL” and “ICM (Secret)”can be stored.
- If you are storing an account code assigned in [310] “Account Codes”, enter ✳✳ and the account code after a line access number.
- If you want to conceal all or part of a System Speed Dialling number on the display, enter “[” and “]” (press the ICM button) before and after the part you want to conceal. Do not press the ICM button before and after a line access number (9 or 0, 81 through 86) or an account code. “[” and “]” are counted as one digit.
- Press ← or → to scroll the display

- **Feature References**

  Section 3, Features

  Secret Dialling, System Speed Dialling

[002] *System Password*

Assigns the password required for entering the System Programming mode. Also it is used to set an extension password.

0 0 2 NEXT **password** STORE END

4 digits
(0000···9999)

Default 1234

- To correct a wrong entry, press the CLEAR button and enter the new one.

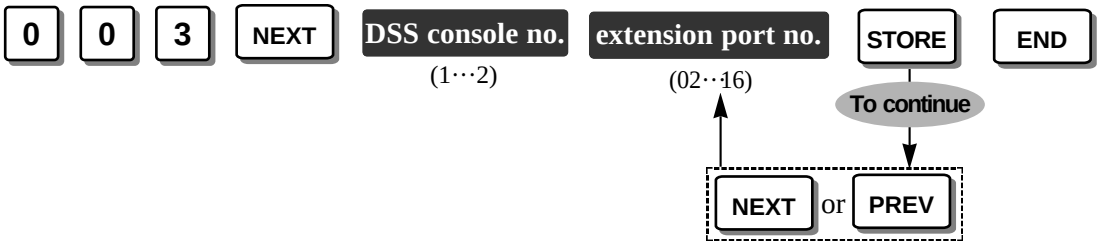
- **Feature Reference**

  Section 3, Features

  Extension Password / System Password

[003] *DSS Console Port Assignment*

Assigns a maximum of 2 port numbers to connect the DSS console(s).



Default All DSS consoles – Disable (Not stored)

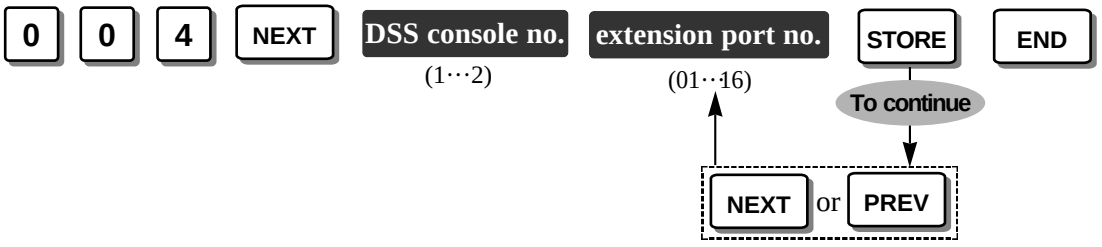
- Two DSS consoles cannot be assigned to the same port number.
- Extension port 01 is the manager extension. So please do not assign extension port 01 as the DSS console port.
- To not assign an extension port number, press the CLEAR button in the extension port number step.
- The extension port number which has already been assigned as a paired telephone in program [004] "Paired Telephone Assignment for DSS Console" is not available in this program.

- **Feature Reference**

  Section 3, Features
  DSS Console

[004] *Paired Telephone Assignment for DSS Console*

Assigns a port number for an extension paired with the DSS console.



Default Extension port number paired with DSS console 1 – Disable (Not stored)
Extension port number paired with DSS console 2 – Disable (Not stored)

- A single line telephone (SLT) cannot be paired with the DSS console.
- To not assign an extension port number, press the CLEAR button in the extension port number step.
- The extension port number which has already been assigned as a DSS console in program [003] "DSS Console Port Assignment" is not available in this program.

- **Feature Reference**

  Section 3, Features
  DSS Console

[005] *One-Touch Transfer Using a DSS Button*

Selects how an outside call is transferred to any extension using the DSS button.

With Transfer: Press the DSS button to transfer an outside call.

Without Transfer: Press the TRANSFER button then the DSS button to transfer an outside call.

0 0 5 NEXT SELECT STORE END

(**With Transfer**/
Without Transfer)

Default With Transfer

- This program is effective for 2 kinds of DSS buttons. One is on the DSS console, and the other is flexible line key on your proprietary telephone assigned as a DSS button.

- **Operating Instructions References**
  1.2 Proprietary Telephone Settings, “Customising the Buttons on Your Telephone”, DSS (Direct Station Selection) Button
  1.9 DSS Console Features, “Initial Settings”, One-Touch Dialling Assignment

[006] *Time (Day/Night/Lunch) Service Changing Mode*

Selects changing the day, night and lunch service manually or automatically. For manual changing, refer to the Operating Instructions. For automatic changing, set the next program [007] “Time (Day/Night/Lunch) Service Start Time”.

0 0 6 NEXT SELECT STORE END

(**Man**/Auto)

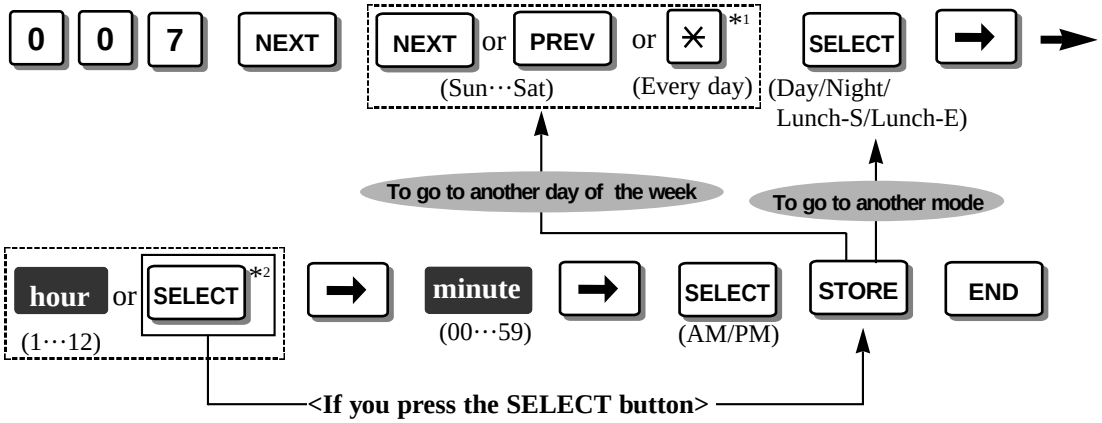
Default Manual

- **Feature Reference**

  Section 3, Features
  Time (Day/Night/Lunch) Service

[007] *Time (Day/Night/Lunch) Service Start Time*

Sets the starting time on a week day basis, when "Automatic" is selected in program [006] "Time (Day/Night/Lunch) Service Changing Mode".



***1** To assign every day of the week to one selection, press the ✳ button.

***2** If the SELECT button is pressed, the display will show the previous entry. If the previous setting was "None", press the SELECT button to enter the starting time. If you do not need to change the time service, keep pressing the SELECT button until "None" is displayed. For example, if Monday's day mode is set to "None", the day mode will not be turned on Monday.

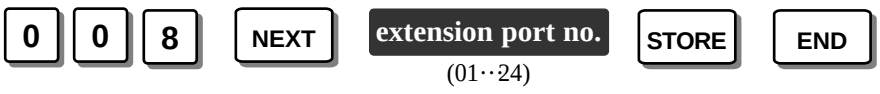
Default Everyday – Day – 9:00 AM / Night – 5:30 PM /
Lunch-S (starting) – None / Lunch-E (ending) – None

- **Feature Reference**

  Section 3, Features
  Time (Day/Night/Lunch) Service

[008] *Operator Assignment*

Assigns an extension port number for the operator.



Default Jack-01

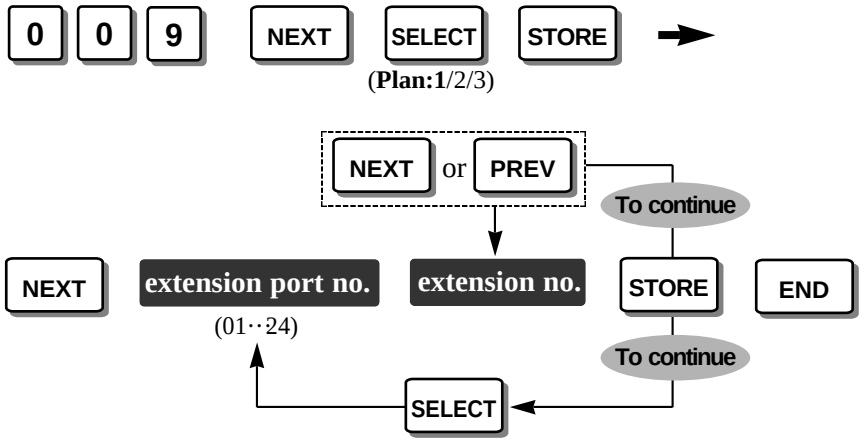
- **Feature References**

  Section 3, Features
  Operator / Manager Extension, Operator Call

[009] *Extension Number Assignment*

Selects an extension numbering plan, **Plan 1**, **Plan 2** or **Plan 3**, and assigns an extension number to each extension.

Plan 1: Available extension numbers are 200 through 299.
Plan 2: Available extension numbers are 100 through 499.
Plan 3: Available extension numbers are 10 through 49.



Default Plan 1: extension ports 01 through 24 – extension numbers 201 through 224

- If the selected extension numbering plan is the same as the previously stored one, 2 beeps will be heard.
- If "Plan 2" or "Plan 3" is selected, the default extension numbers will change automatically as follows.
  Plan 2: extension ports 01 through 24 – extension numbers 201 through 224
  Plan 3: extension ports 01 through 24 – extension numbers 21 through 44
- If "Plan 2" or "Plan 3" is selected, some feature numbers will also change. Refer to the attached leaflet for details.
- A double entry of the extension number is invalid. If the programmed extension number is the same as a previously stored one, 2 beeps will be heard when the STORE button is pressed. When extension number 203 has already been assigned to port number 03, to assign extension number 203 to the port number 05, change the extension number of port number 03 to another one. Then assign extension number 203 to port number 05.
- If a Voice Processing System (VPS) is connected to the system, select "Plan 1" or "Plan 2" in this program and "Enable" in [103] "DTMF Integration", so that the DTMF integration between VPS and the system can be enabled.
- If a rotary telephone is used at any extension, select "Plan 1" in this program.

- **Feature Reference**
  Section 3, Features
  Intercom Calling

[010] *LCD Time Display Selection*

Selects how the current time and date will be displayed on a proprietary telephone while idle. Either 12 hour or 24 hour (military time) can be selected.

0 1 0 NEXT SELECT STORE END

(**12**/24 HOUR)

Display example:

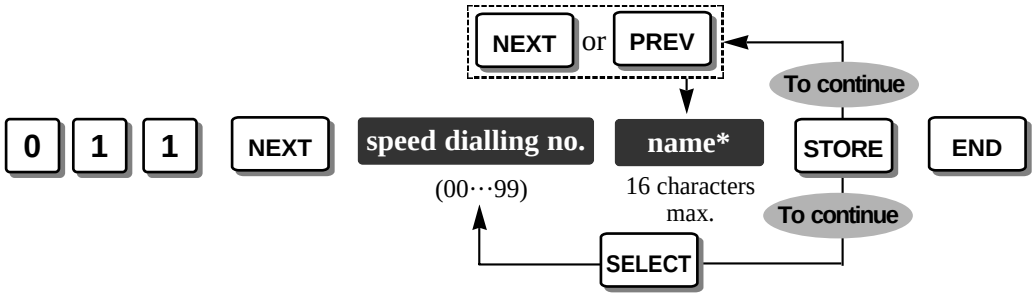
When “12 HOUR” is selected: Jan 1 11:20PM
When “24 HOUR” is selected: 1 Jan 23:20

Default 12 HOUR

- Programs [000] “Date and Time Setting” and [007] “Time (Day/Night/ Lunch) Service Start Time”, and the Timed Reminder feature are assigned using 12-hour time regardless of this program. The SMDR printout is also printed using 12-hour time.

[011] *System Speed Dialling Name Setting*

Assigns a name to each System Speed Dialling number. The name will be displayed when making a call by using the System Speed Dialling feature. It will also be used for the Caller ID feature.



***** Name:
Combination Table

Keys \ Pressing SELECT (Times)	0	1	2	3	4	5	6
1	1	Q	q	Z	z	!	?
2	2	A	a	B	b	C	c
3	3	D	d	E	e	F	f
4	4	G	g	H	h	I	i
5	5	J	j	K	k	L	l
6	6	M	m	N	n	O	o
7	7	P	p	R	r	S	s
8	8	T	t	U	u	V	v
9	9	W	w	X	x	Y	y
0	0		.	,	’	:	;
✳	✳	”	+	-	=	<	>
#	#	$	%	&	@	(	)

<Example>
— To enter “Mike;
1. Press 6 and then press the SELECT button once to enter “M”.
2. Press 4 and then press the SELECT button 6 times to enter “i”.
3. Press 5 and then press the SELECT button 4 times to enter “k”.
4. Press 3 and then press the SELECT button 4 times to enter “e”.

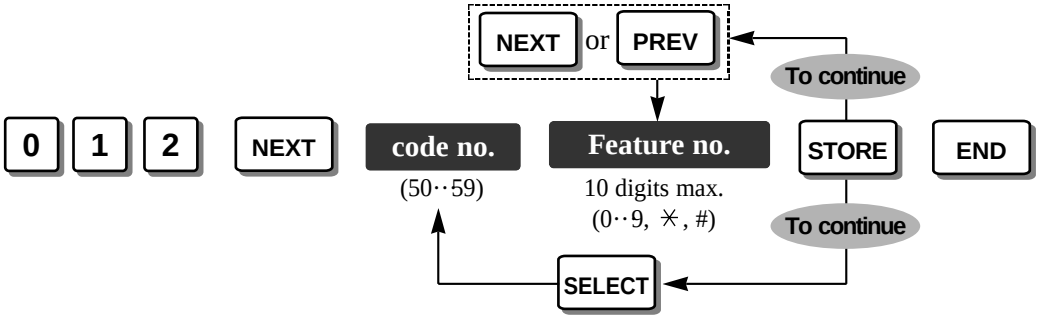
Default All System Speed Dialling numbers – Not stored.

- To erase all letters, press the CLEAR button. To erase 1 letter, press [←].
- Each name has a maximum of 16 characters.
- Press [→] to scroll the display to the right side.

- **Feature References**
  Section 3, Features
  System Speed Dialling

[012] *Alternative Feature Numbering Plan*

Replaces any feature number with a code number 50 through 59. This is useful when selecting “Plan 2” or “Plan 3” in program [009] “Extension Number Assignment” as some feature numbers change for Plan 2 and Plan 3 and they might be difficult to remember. (Refer to the attached leaflet “Notice for the Feature Numbers”.) All extension users can dial these assigned codes instead of feature numbers.

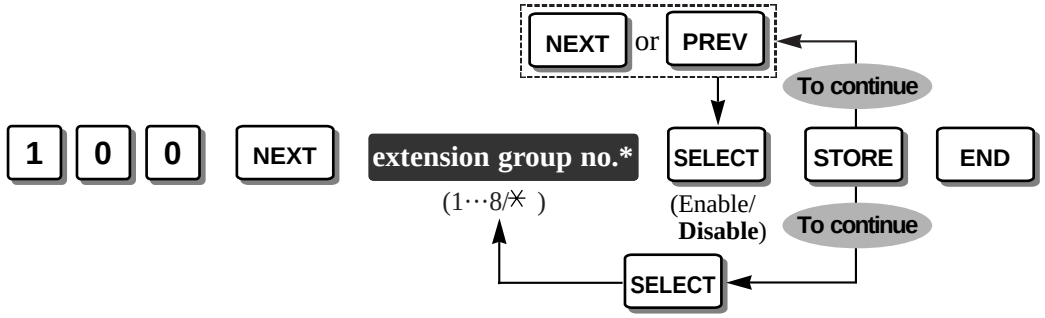


Default All codes – Not stored.

- This is not possible when “Plan 1” has been selected in program [009].

[100] *Hunting Group Set*

Enables or disables automatically locating an idle extension in the same extension group as the dialled extension, when the called extension is busy. If "Enable" is selected, assign the next program [101] "Hunting Type". Extension groups are defined in program [600] "Extension Group Assignment".



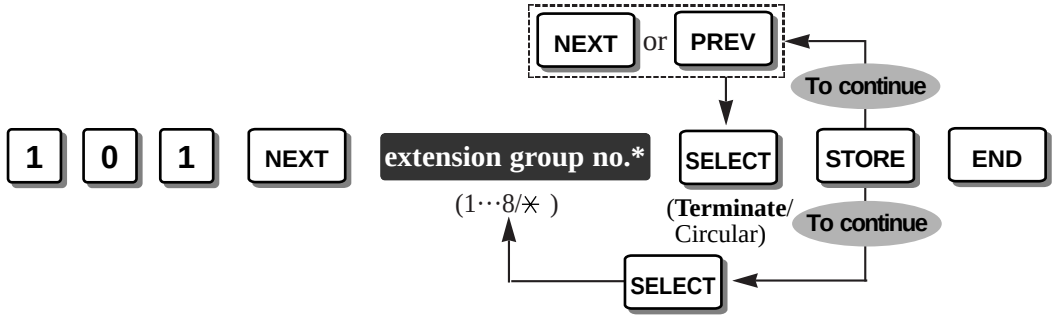
***** Extension group number: 1 through 8 / ✳ (all extension groups)

Default All extension groups – Disable

- **Feature Reference**
  Section 3, Features
  Extension Hunting

[101] *Hunting Type*

Assigns the hunting type, **Terminate** or **Circular**, to each extension group when a hunting group is enabled in program [100] "Hunting Group Set".



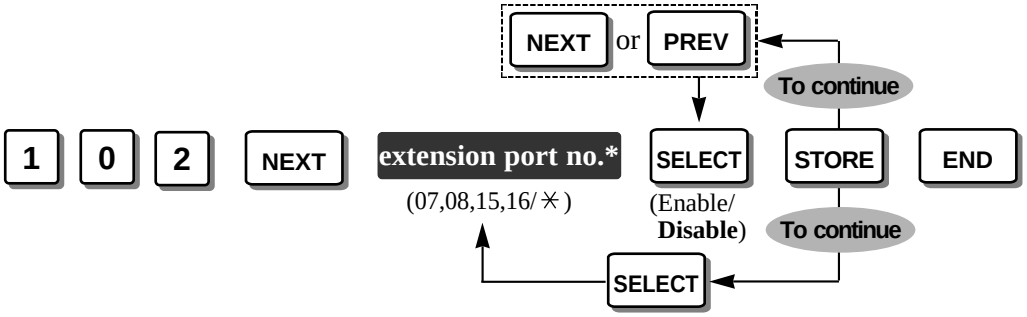
***** Extension group number: 1 through 8 / ✳ (all extension groups)

Default All extension groups – Terminate

- **Feature Reference**
  Section 3, Features
  Extension Hunting

[102] *Voice Mail Port for KX-TVP100*

Assigns the extension port number(s) connected to a Panasonic Voice Processing System (VPS) equipment (KX-TVP100). Only extension ports 07, 08, 15 and 16 are available.



***** Extension port number: 07, 08, 15 and/or 16 / ✳ (All 4 extension ports)

Default All 4 extension ports – Disable

- **Feature Reference**

  Section 3, Features

  Voice Mail Integration for KX-TVP100

[103] *DTMF Integration for KX-TVP100*

Enables or disables the system to send codes (DTMF signals) to the extension(s) assigned as the Voice Mail Port in program [102] “Voice Mail Port”. These DTMF signals indicate the state of the call (busy, answered, ringing, disconnected, etc.) in addition to the normal call tones. They also enable the Panasonic Voice Processing System (VPS) equipment (KX-TVP100) to immediately recognise the current state of the call and speed up the call handling.

1 0 3 NEXT SELECT STORE END

(Enable/**Disable**)

Default Disable

- The table on next page describes the codes (DTMF signals), call state and conditions for the DTMF integration operation.
- Select “Plan 1” or “Plan 2” in program [009] “Extension Number Assignment”, and select “Enable” in this program to enable the DTMF integration.
- This feature greatly improves the performance of the Panasonic KX-TVP100: Voice Processing Systems which have been programmed for Inband Signalling. For more information about Inband Signalling, refer to your Voice Processing System manual.

- **Feature Reference**

  Section 3, Features

  Voice Mail Integration for KX-TVP100

DTMF signals

Code	Call State	Conditions
1	Ringback Tone	When an extension a VPS has dialled is ringing.
2	Busy Tone	When an extension a VPS has dialled is busy.
3	Reorder Tone	When a VPS dials an invalid extension number or when a VPS is accidentally connected to another Voice Mail Port.
4	DND	When an extension a VPS has dialled sets the DND (Do Not Disturb) feature.
5	Answer	When an extension which a VPS has dialled answers the call.
6	Forwarded to Voice Processing System (Ringing)	When a called extension is forwarded to a VPS, the call can be forwarded to another available VPS. In this way, the first VPS, typically an Auto-Attendant, can release the call to another VPS and receive another incoming call.
7	Forwarded to Voice Mail (Busy)	When a called extension is forwarded to a VPS and no VPSs are available to receive the call.
8	Forwarded to Extension	When a called extension is forwarded to another, non-VPS extension.
9	Confirmation Tone	When a VPS has successfully turned a message waiting lamp on or a message waiting lamp off.
#9	Disconnect	When the calling party disconnects.

[104] *Hold Mode Selection*

You can select how to hold a line and transfer a call to another extension with a single line telephone (SLT), **Hold-1**, **Hold-2** or **Hold-3**. If the following occurs frequently with an SLT, select "Hold-2" or "Hold-3".

• Nobody answers when a call is received.

• A busy tone is heard even though nobody is using the exchange line.

If a call is not terminated after going on-hook, the above cases occur. To avoid these problems, select "Hold-2" or "Hold-3". Every call will be terminated unless 50 is dialled after pressing the Recall button in the Hold-2 and Hold-3 modes.

Hold-1: To hold a line or transfer a call, press the Recall button.

Hold-2: To hold a line, press the Recall button and dial 50. To transfer a call, press the Recall button.

Hold-3: To hold a line or transfer a call, press the Recall button and dial 50.

1 0 4 NEXT SELECT STORE END

(**Hold-1**/Hold-2 Hold-3)

Default Hold-1

• **Feature Reference**

Section 3, Features

Hold

[105] *Conference Tone*

Enables or disables the confirmation tone before starting or ending a conference call established by the Conference feature or Executive Busy Override feature.

1 0 5 NEXT SELECT STORE END

(**Enable**/ Disable)

Default Enable

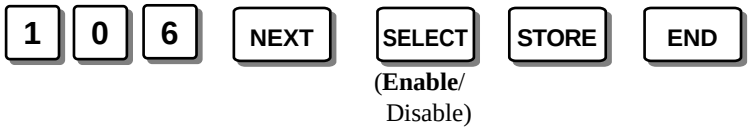
• **Feature References**

Section 3, Features

Conference (3-party), Conference (5-party), Executive Busy Override

[106] *External Paging Access Tone*

Enables or disables the splash tone before paging is sent over the external pager.

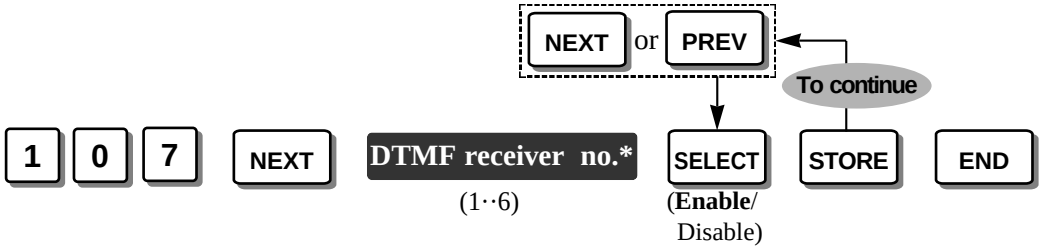


Default Enable

- **Feature Reference**
  Section 3, Features
  Paging

[107] *DTMF Receiver Check*

Enables or disables the 6 DTMF receivers to check whether the DTMF receivers are activated normally or not. Refer to the Section 6 Troubleshooting, "While Operating" for further information on checking the DTMF receivers.

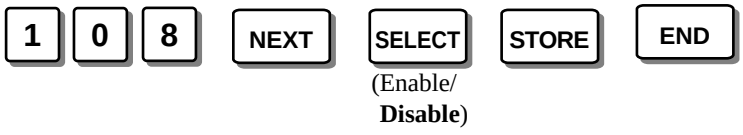


***** DTMF receiver number: 1 and 2 (for checking extension ports 01 through 08)/
3 and 4 (for checking extension ports 09 through 16)/
5 and 6 (for checking extension ports 17 through 24)

Default All DTMF receivers – Enable

[108] *Recall Mode for a Locked Extension*

Enables or disables a locked extension to send a recall signal during a conversation with an external party.



Default Disable

[109] *CO Indicator Assignment*

Enables or disables an extension which was assigned not to ring in programs [408]-[410] "Flexible Ringing Assignment" to answer an incoming outside call. The line key indicator will flash when an outside call is received. If enabled, an extension user can answer the call by pressing the flashing line key. If disabled, the user cannot answer the call even if they press the line key.

1 0 9 NEXT SELECT STORE END

(**Enable**/ Disable)

Default Enable

! • The extension must be a proprietary telephone with a line key and indicator.

[110] *Recall Key Mode*

Assigns the sending of the recall signal mode, **MODE 1** or **MODE 2**, when the RECALL button on a proprietary telephone is pressed.

MODE 1: The recall signal is sent during the programmed time in [418] "Recall Time".

MODE 2: The recall signal is sent while the RECALL button is pressed if the time the RECALL button was pressed is more than the programmed time in [418]. This will be useful to disconnect the current call and make another call without hanging up. If the time the RECALL button was pressed is less than the programmed time in [418], the recall signal will be sent during the programmed time.

1 1 0 NEXT SELECT STORE END

(**MODE1**/ MODE2)

Default MODE 1

☞ • **Feature Reference**

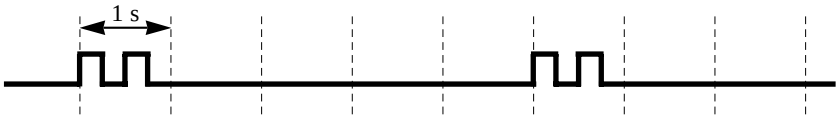
Section 3, Features
Recall

[111] *Hold Music Selection*

Selects the music source, **External** or **Tone**, which an external party will hear when an outside call is on hold.

External : Uses an external music source, such as a radio.

Tone : Uses the cyclic tone below equipped with the system.



1 1 1 NEXT SELECT STORE END

(**External**/Tone)

Default External

! • The music source can also be used for BGM.

☞ • **Feature Reference**

Section 3, Features
Music on Hold / Background Music (BGM)

[112] *DSS Console Indication Mode*

Enables or disables the Busy Lamp Field (BLF) on the DSS button to indicate the status, Forward (FWD) or Do Not Disturb (DND), of corresponding extensions.

1 1 2 NEXT SELECT STORE END

(**Enable**/
Disable)*

***** Enable: FWD – Flashing slowly, DND – Flashing moderately
Disable: FWD – Off, DND – Off

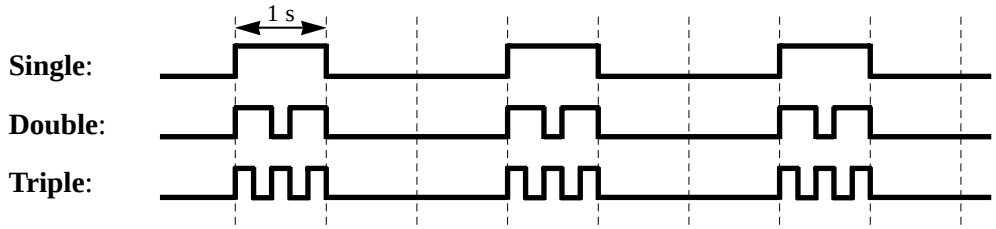
Default Enable

☞ • **Feature Reference**

Section 3, Features
DSS Console

[115] *Extension Ringing Pattern Selection*

Selects the extension ringing pattern when an intercom call received, either **Single**, **Double** or **Triple**.



1 1 5 NEXT SELECT STORE END

(**Single**/Double/
Triple)

Default Single

- The length of the ring cycle for a single line telephone (SLT) is determined in program [124] "SLT Ringing Mode Selection".
- The extension ringback pattern is determined at the same time.

- **Feature Reference**

  Section 3, Features
  Ringing Pattern Selection

[116] *Conference Pattern Selection*

Selects the maximum number of external parties which can attend a conference. The maximum number of conference parties is 5.

3-party C-0 E-3: No external parties can attend a 3-party conference.
3-party C-1 E-3: One external party can attend a 3-party conference.
3-party C-2 E-3: A maximum of 2 external parties can attend a 3-party conference.
5-party C-2 E-5: A maximum of 2 external parties can attend a 5-party conference.

1 1 6 NEXT SELECT STORE END

(3-party C-0 E-3/
3-party C-1 E-3/
3-party C-2 E-3/
5-party C-2 E-5)

Default 5-party C-2 E-5

- **Feature References**

  Section 3, Features
  Conference (3-Party), Conference (5-Party)

[117] *Call Pickup Tone*

Enables or disables the confirmation tone when the Call Pickup feature is activated.

1 1 7 NEXT SELECT STORE END

(**Enable**/ Disable)

Default Enable

- **Feature Reference**

  Section 3, Features
  Call Pickup

[118] *Pulse Restriction*

Enables or disables sending pulse dialling to the Local Exchange during a conversation with an external party when “Pulse Mode” or “Call Block Mode” is selected in program [401] “Dial Mode”.

1 1 8 NEXT SELECT STORE END

(**Enable**/ Disable)

Default Enable

[119] *Redialling after Pulse to Tone Conversion*

Enables or disables sending tone dialling to the Local Exchange when an extension user redials after changing the pulse mode into tone mode by pressing ✳ and #.

1 1 9 NEXT SELECT STORE END

(Enable/ **Disable**)

Default Disable

- **Feature Reference**

  Section 3, Features
  Pulse to Tone Conversion

[120] *Bell Frequency*

Selects the bell frequency sent to a single line telephone (SLT).

1 2 0 NEXT SELECT STORE END

(20/**25** Hz)

Default 25 Hz

[121] *Automatic Exchange Line Access Number Selection*

Selects the Automatic Exchange Line Access number (0 or 9).

1 2 1 NEXT SELECT STORE END

(Dial 0/Dial **9**)

Default Dial 9

! • If you select “0”, the operator call will automatically be “9”. If you select “9”, the operator call will automatically be “0”

☞ • **Feature References**

Section 3, Features

Automatic Exchange Line Access Number, Operator Call

[122] *Automatic Rotation for Exchange Line Access*

Enables or disables the rotation of exchange lines seized for “Automatic Exchange Line Access”.

1 2 2 NEXT SELECT STORE END

(Enable
Disable)

Default Disable (Does not rotate.)

☞ • **Feature Reference**

Section 3, Features

Automatic Exchange Line Access Number

[123] *Break Ratio*

Selects the pulse break rate, **MODE1** or **MODE 2**, when a Pulse is sent to the Local Exchange during a conversation.

MODE 1: 66 %
MODE 2: 60 %

1 2 3 NEXT SELECT (**MODE1**/ MODE2) STORE END

Default MODE 1

[124] *SLT Ringing Mode Selection*

Selects the length of the ring cycle for a single line telephone (SLT).

MODE 1: 5 second cycle
MODE 2: 3 second cycle

1 2 4 NEXT SELECT (MODE1/ **MODE2**) STORE END

Default MODE 2

[125] *Call Barring Check for ✳ and #*

Assigns whether the entered "✳" and "#" are checked by call barring or not. This assignment is required for certain Local Exchanges to prevent toll fraud. Some Central Offices ignore the user-dialled "✳" and "#". If your Local Exchange ignores these symbols, select "Disable".

1 2 5 NEXT SELECT (**Enable**/ Disable) STORE END

Default Enable

- **Feature Reference**

  Section 3, Features
  Call Barring

[126] *DSS Off-Hook Mode*

Enables or disables making an intercom call just by pressing a DSS button on a DSS Console. If enabled, going off-hook is not needed.

1 2 6 → NEXT → SELECT (**Enable**/ Disable) → STORE → END

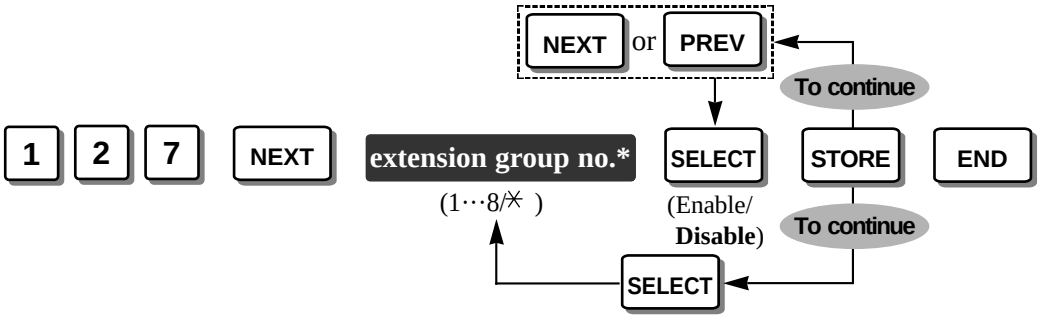
Default Enable

- This assignment is also effective for a flexible line key on a proprietary telephone assigned as a DSS button.

- **Feature Reference**
  Section 3, Features
  Intercom Calling

[127] *Pickup Group Set*

Enables or disables the ability of an extension to pickup a call ringing at another extension (if it is in the same extension group) by just going off-hook. If enabled, the feature number (40) is not needed to pickup the call.



* Extension group number: 1 through 8 / ✳ (all extension groups)

Default All extension groups – Disable (the feature number (40) is required to pickup the call)

- To prevent other extensions in the same extension group from picking up outside calls by just going off-hook, select “Disable” in program [109] “CO Indicator Assignment”. Then even though “Enable” is selected in this program [127], outside calls cannot be picked up by others by just going off-hook.

- **Feature Reference**
  Section 3, Features
  Call Pickup

[200] *Hold Recall Time*

Assigns the length of the hold recall timer. Hold recall (a ring tone or an alarm tone) is heard when the timer expires. If hold recall is not required, select "Disable".

2 0 0 NEXT SELECT STORE END

(**30 sec**/
1/1.5/2/3/4/5/6 min/
Disable)

Default 30 seconds

- **Feature References**
  Section 3, Features
  Call Park, Hold

[201] *Transfer Recall Time*

Assigns the length of the transfer recall timer. If a transferred call is not answered within the programmed time, the call will be returned to the original caller.

2 0 1 NEXT SELECT STORE END

(15/**30 sec**/
1/2 min)

Default 30 seconds

- **Feature Reference**
  Section 3, Features
  Call Transfer – to Extension

[202] *Call Forwarding Start Time*

Assigns time for the Call Forwarding – No Answer feature. If a call is not answered within the programmed time, the call will be forwarded to the destination.

2 0 2 NEXT SELECT STORE END

(5/10/**15**/20 sec delay)

Default 15 seconds delay

- **Feature Reference**

  Section 3, Features
  Call Forwarding

[203] *Pickup Dial Delay Time*

Assigns the length of time for the Pickup Dialling feature. If the telephone user lifts the handset, the programmed party is called automatically when the timer expires. This delay gives the user an opportunity to enter numbers before automatic dialling occurs.

2 0 3 NEXT SELECT STORE END

(1/2/**3**/4 sec)

Default 3 seconds

- **Feature Reference**

  Section 3, Features
  Pickup Dialling

[204] *Call Duration Count Start Time*

Assigns the start time of a conversation either immediately after an exchange line is seized or after dialling. This corresponds to the length of the conversation displayed on the LCD and printed on the printer (SMDR).

2 0 4 NEXT SELECT STORE END

(5/**10**/15/20/25/30/35/40/45/50 sec after dial/Instantly)

Default 10 seconds after dialling

- If reverse signal detection is enabled in program [424] "Reverse (Polarity) Circuit Assignment", the system will automatically start the timer immediately after an external party answers a call.

- **Feature References**

  Section 3, Features

  Polarity Reverse Detection, Station Message Detail Recording (SMDR)

[206] *Dialling Start Time*

Assigns the minimum length of the pause time the system waits before dialling after seizing an exchange line.

2 0 6 NEXT SELECT STORE END

(**0**/250/500/750/1000/1250/1500 ms)

Default 0 millisecond

- **Feature Reference**

  Section 3, Features

  Outside Calling

[207] *Recall Timing Range Selection*

Sets the hookswitch recall time range sent from an extension to the system.

MODE 1: 50 to 180 milliseconds.
MODE 2: 80 to 180 milliseconds.
MODE 3: 80 to 650 milliseconds.
MODE 4: 80 to 1000 milliseconds.
MODE 5: 200 to 1000 milliseconds.

2 0 7 NEXT SELECT STORE END

(**MODE1**/MODE2/
MODE3/MODE4/
MODE5)

Default MODE 1

- **Feature Reference**

  Section 3, Features
  Recall Button on a Single Line Telephone

[208] *Interdigit Time*

Assigns the maximum time allowed between digits for an outgoing outside call.

2 0 8 NEXT SELECT STORE END

(5/10/15/**20** sec)

Default 20 seconds

- The interdigit timer applies until the call barring check is completed. When the timer expires, an outgoing outside call will be disconnected while dialling, if “Enable” was selected in program [211] “No Dial Disconnection”.
- For a single line telephone, an outgoing outside call will be released from a DTMF receiver when the interdigit timer expires.

- **Feature Reference**

  Section 3, Features
  Call Barring

[210] *DTMF Time*

Assigns the minimum duration of a DTMF signal sent to an exchange line which is set to the DTMF mode in program [401] “Dial Mode”.

MODE 1: 80 milliseconds
MODE 2: 160 milliseconds

2 1 0 NEXT SELECT STORE END

(**MODE1**/ MODE2)

Default MODE 1

[211] *No Dial Disconnection*

Enables or disables disconnecting an exchange line if an extension user does not dial anything within 20 seconds after an exchange line is seized.

2 1 1 NEXT SELECT STORE END

(**Enable**/ Disable)

Default Enable (Disconnect)

- The interdigit timer assigned in program [208] “Interdigit Time” applies until the call barring check is completed. When the timer expires, an outgoing outside call will be disconnected while dialling, if “Enable” was selected in this program.

- **Feature Reference**
  Section 3, Features
  Call Barring

[212] *Exchange Line Duration Time Limit*

Sets the maximum time allowed for a conversation with an external party. This program is effective for the extension(s) which assigned “Enable” in program [613] “Exchange Line Duration Time Limit Selection”.

2 1 2 NEXT **time** STORE END

(1··32 minutes)

Default 10 minutes

- A beep sounds at 5-second intervals 15 seconds before the programmed time expires.
- This program is effective only for an outgoing outside call.
- When making a call after an exchange line is seized and transferred to the enabled extension in program [613] by another extension, the timer starts after the call has been transferred.

- **Feature Reference**
  Section 3, Features
  Limited Call Duration

[213] *Bell Off Detection*

Sets the maximum time between detecting one bell signal and the next from the Local Exchange. In case the next bell signal is not detected within the programmed time, the system recognises the bell signal has stopped.

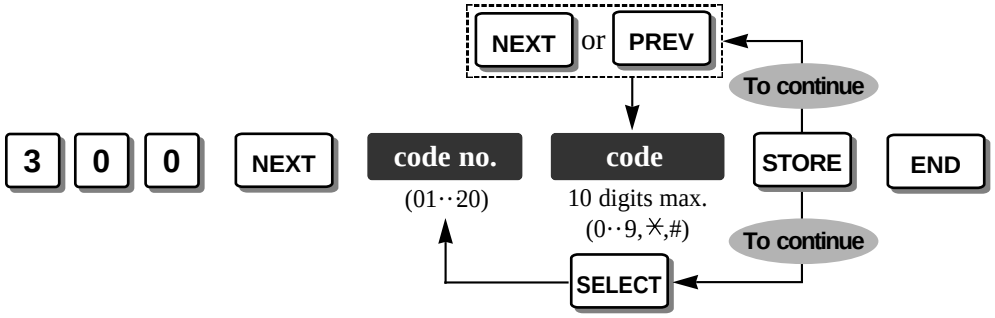
2 1 3 NEXT SELECT STORE END

(**3**/6/12 sec)

Default 3 seconds

[300] *Carrier Excepted Code Assignment*

Assigns up to 20 carrier excepted codes, for example, Per Call Block code (✳ 141). The system disregards the assigned code, and call barring and ARS are applied to the numbers after the code.



Example:
Code no. 01: ✳ 141
Dialling number: ✳ 141 01633 877 467
disregarded applied to the call barring and ARS

Default All codes – Not stored.

- "x" (press the PAUSE button) substitutes any number (= wild card).
- To correct a wrong entry, press the CLEAR button and enter the new one.

[301] *Call Barring – System Speed Dialling Boundary Class*

Assigns the call barring class for System Speed Dialling numbers. System Speed Dialling numbers can be assigned in program [001] "System Speed Dialling Entry".

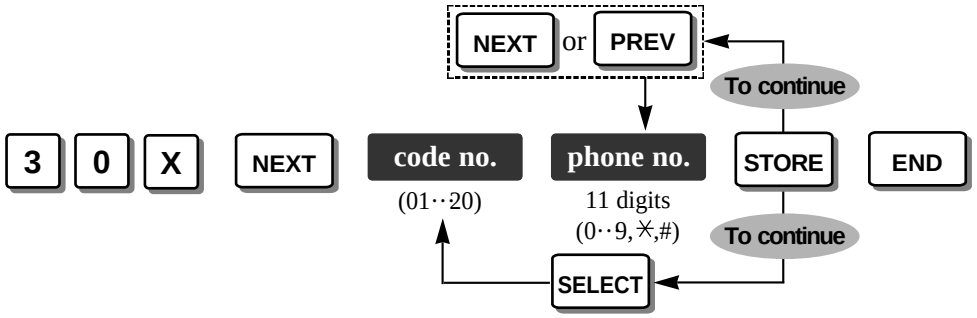
***** Boundary Class: 1 through 5

Default Boundary Class -1

- **Feature Reference**
  Section 3, Features
  Call Barring for System Speed Dialling

[302]-[305] *Call Barring – Classes 2 through 5 Denied Codes*

Assigns up to 20 toll call numbers which are restricted to make outside calls on a class of service (COS) basis for each program.



X – Program address selection number: 2 ([302] for Class 2) / 3 ([303] for Class 3)/ 4 ([304] for Class 4) / 5 ([305] for Class 5)

Default All codes – Not stored.

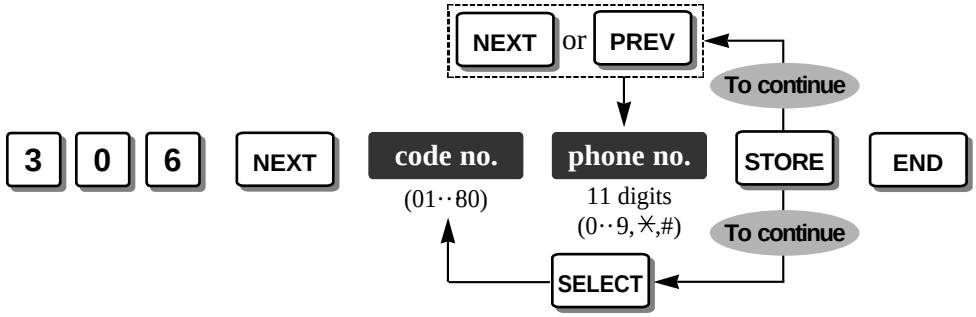
- "x" (press the PAUSE button) substitutes any number (= wild card).
- Each phone number should consist of 11 digits.
- To correct a wrong entry, press the CLEAR button and enter the new one.

- **Feature Reference**

  Section 3, Features
  Call Barring

[306] *Call Barring – Exception Codes*

Assigns up to 80 exception numbers which are allowed to make outside calls on a class of service (COS) basis even when denied codes are programmed in [302]-[305] "Call Barring – Classes 2 through 5 Denied Codes".



Default All codes – Not stored.

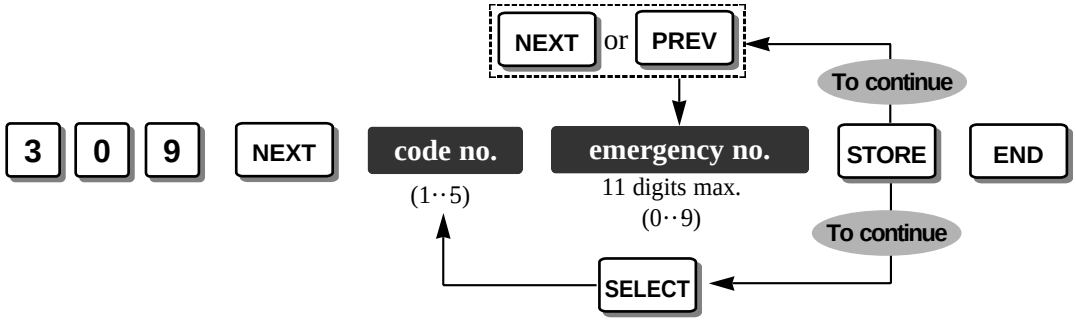
- "x" (press the PAUSE button) substitutes any number (= wild card).
- Each phone number should consist of 11 digits.
- To correct a wrong entry, press the CLEAR button and enter the new one.

- **Feature Reference**

  Section 3, Features
  Call Barring

[309] *Emergency Dial Number Set*

Assigns up to 5 emergency numbers, for example, a police station or fire station. Calls with these numbers are free from restrictions, for example, call barring, Account Code – Forced/Verify–All mode and Electronic Extension Lock.



Default Code-01 = 999, Code-02 = 112, Other codes = Not stored.

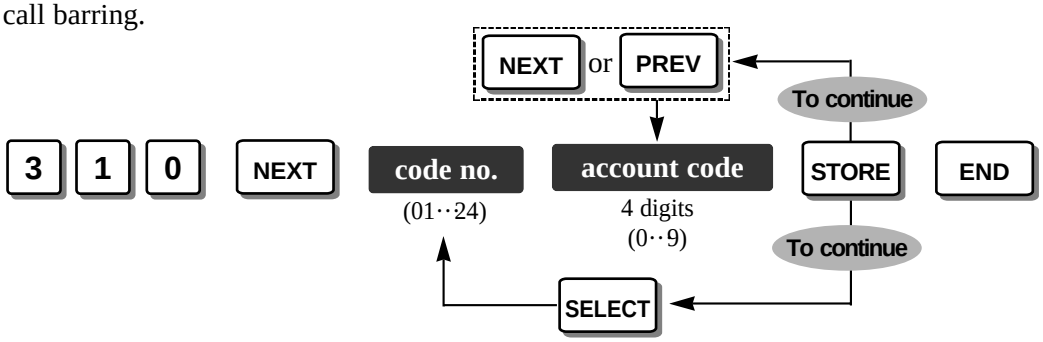
- To correct a wrong entry, press the CLEAR button and enter the new one.

- **Feature References**

  Section 3, Features
  Emergency Call, Call Barring

[310] *Account Codes*

Assigns up to 24 account codes which are compared with the code entered when "Verify-All" or "Verify-Toll (Call Barring)" is selected in program [605] "Account Code Entry Mode". If "Verify-All" is selected, an account code is required to make an outside call. If "Verify-Toll (Call Barring)" is selected, an account code is only required to override call barring.



Default All codes – Not stored.

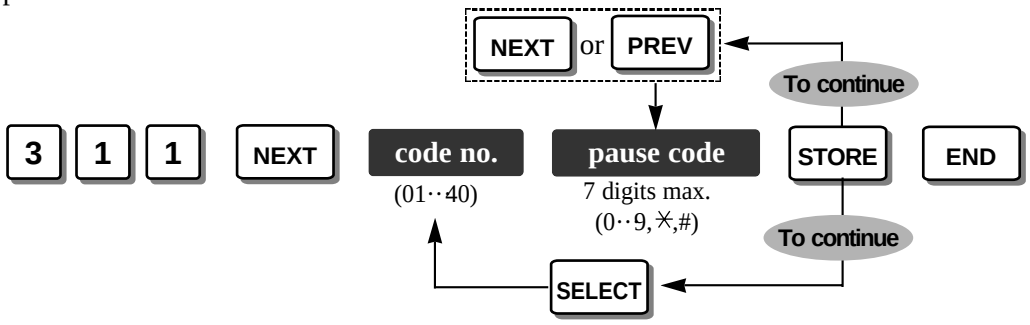
- To correct a wrong entry, press the CLEAR button and enter the new one.

- **Feature References**

  Section 3, Features
  Account Code Entry, Call Barring Override by Account Codes

[311] *Automatic Pause Insertion Codes*

Assigns up to 40 automatic pause insertion codes which are checked with the outside outgoing call number. When one of the codes is the same as the call number, the pause time assigned in program [417] "Pause Time" is automatically inserted after the code. If a second dial tone is sent from your Local Exchange, it is convenient to assign the area code as the pause code.



Default All codes – Not stored.

- To correct a wrong entry, press the CLEAR button and enter the new one.

[312] *Call Barring – Extension Lock Boundary Class*

Assigns the Call Barring class for an extension which has set the Electronic Extension Lockout or Remote Extension Lock Control.

3 1 2 NEXT SELECT STORE END

(**Disable**/ COS-2··5)*

***** Boundary COS: 2 through 5 / Disable (Disables all outside outgoing calls.)

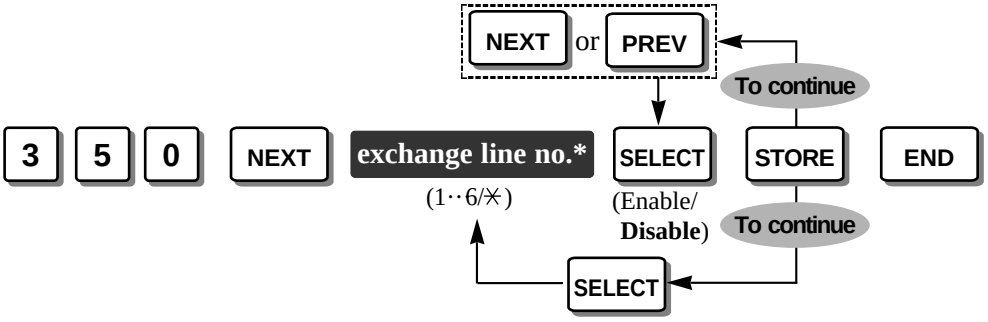
Default Disable

- **Feature Reference**

  Section 3, Features
  Call Barring – Extension Lock Boundary Class

[350] *ARS Selection*

Enables or disables the ARS feature for each exchange line.



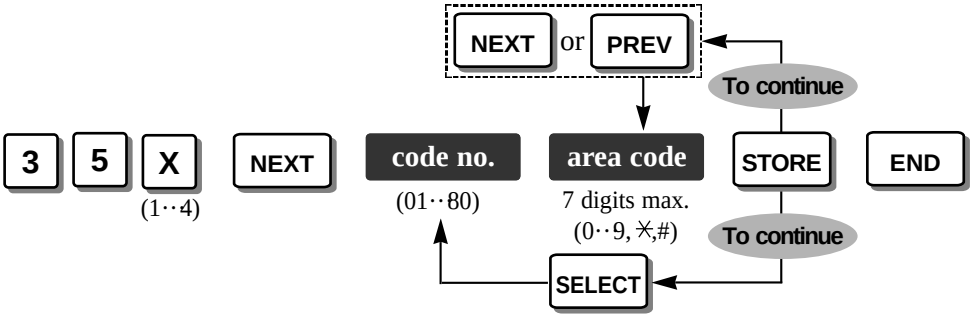
***** Exchange line number: 1 through 6 / ✳ (All exchange lines)

Default All exchange lines – Disable

- **Feature Reference**
  Section 3, Features
  Automatic Route Selection (ARS)

[351]-[354] *Routes 1 through 4 Selection Codes (Leading Digits)*

Assigns up to 80 area codes for outside calls which are applied to the ARS feature for each route.



X – Program address selection number: 1 ([351] for Route 1) / 2 ([352] for Route 2)/ 3 ([353] for Route 3) / 4 ([354] for Route 4)

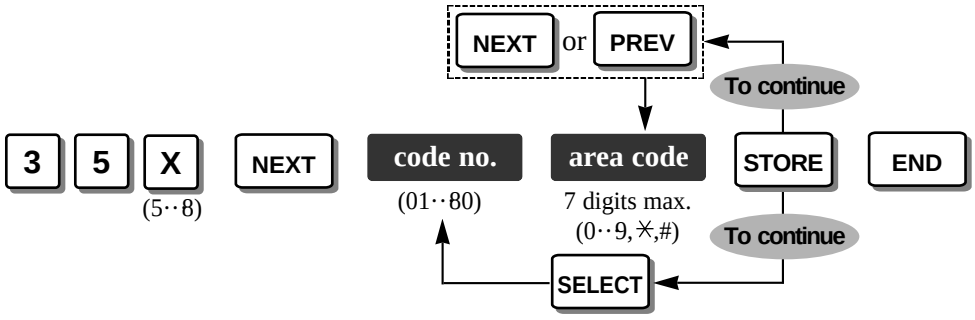
Default All codes – Not stored.

- "x" (press the PAUSE button) substitutes any number (= wild card).
- To correct a wrong entry, press the CLEAR button and enter the new one.

- **Feature Reference**
  Section 3, Features
  Automatic Route Selection (ARS)

[355]-[358] *Routes 1 through 4 Exception Codes*

Assigns up to 80 area codes for outside calls which are not applied to the ARS feature for each route.



X – Program address selection number: 5 ([355] for Route 1) / 6 ([356] for Route 2)/ 7 ([357] for Route 3) / 8 ([358] for Route 4)

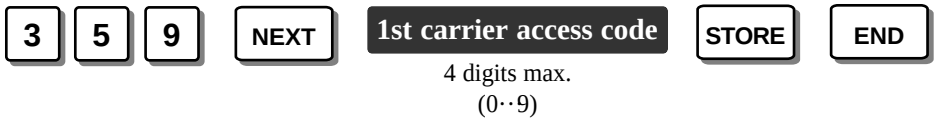
Default All codes – Not stored.

- "x" (press the PAUSE button) substitutes any number (= wild card).
- To correct a wrong entry, press the CLEAR button and enter the new one.

- **Feature Reference**
  Section 3, Features
  Automatic Route Selection (ARS)

[359] *1st Carrier Selection Code (BT Line Access Code)*

Assigns the first carrier access code. When the code is dialled, the first carrier is always selected even if the ARS feature is enabled.



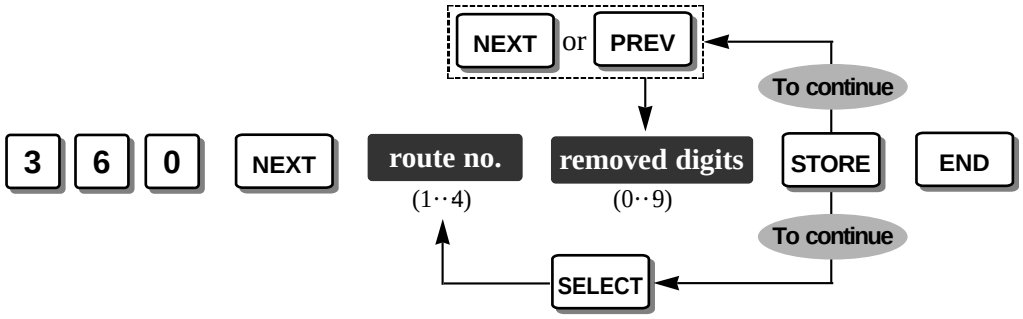
Default 121 (British Telecom Line access code)

- To correct a wrong entry, press the CLEAR button and enter the new one.

- **Feature Reference**
  Section 3, Features
  Automatic Route Selection (ARS)

[360] *ARS Modification – Removed Digits*

Determines how the dialled number applied to the ARS feature should be modified before sending to the exchange line for each route. The digits are deleted from the beginning of the dialled number.

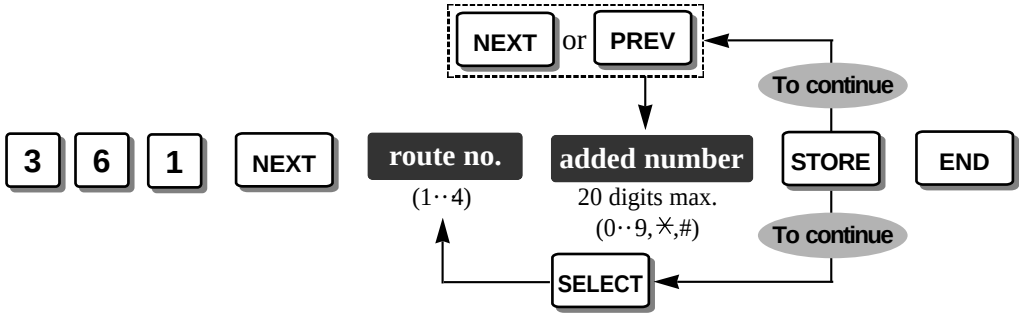


Default All routes – 0 (No deletion)

- **Feature Reference**
  Section 3, Features
  Automatic Route Selection (ARS)

[361] *ARS Modification – Added Number*

Determines how the dialled number applied to the ARS feature should be modified before sending to the exchange line for each route. Numbers are added to the beginning of the dialled number. Numbers can be carrier codes, etc.



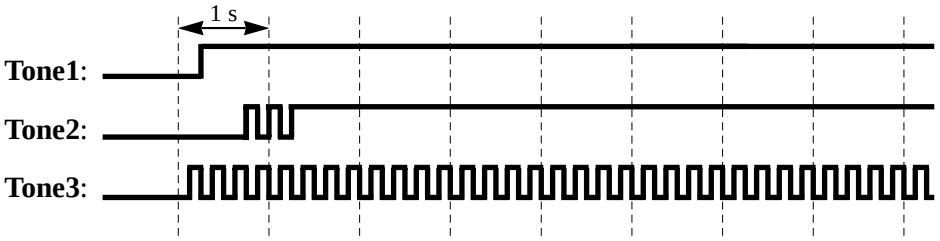
Default Route 1 = 131, Other routes = Not stored.

- To correct a wrong entry, press the CLEAR button and enter the new one.
- Press → to scroll the display to the right side.
- The assigned numbers will be added to the dialled number after deleting the digits programmed in [360] "ARS Modification — Removed Digits".

- **Feature Reference**
  Section 3, Features
  Automatic Route Selection (ARS)

[362] *ARS Dial Tone Pattern Selection*

Selects the dial tone pattern, **Disable** (no tone), **Tone1**, **Tone2** or **Tone3**, generated after seizing an ARS exchange line. The ARS feature is enabled on an exchange line basis in program [350] "ARS Selection". The tone will stop after the first digit (except for an account code) is dialled.



3 6 2 NEXT SELECT STORE END

(Disable/**Tone1**/Tone2/Tone3)

Default Tone1

- **Feature Reference**
  Section 3, Features
  Automatic Route Selection (ARS)

[363] *ARS Interdigit Time*

Assigns the interdigit timer (in seconds) used while the system is checking the dialled number for the ARS feature.

3 6 3 NEXT **time** STORE END

(1··20)

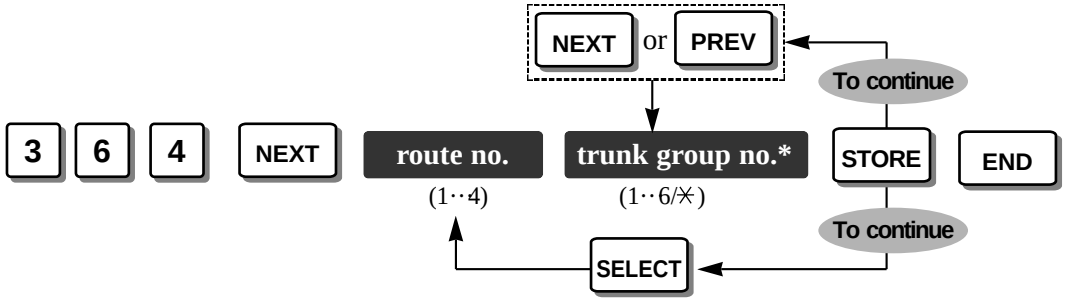
Default 5 seconds

- This assignment should be the same as the interdigit timer assigned in program [208] "Interdigit Time".

- **Feature Reference**
  Section 3, Features
  Automatic Route Selection (ARS)

[364] *ARS Trunk Group*

Assigns trunk group(s) for each ARS route number. Trunk groups are assigned in program [404] "Trunk Group Assignment". An exchange line in the assigned trunk group(s) is automatically seized when making an outside call using the Automatic Exchange Line Access number (9 or 0), and the dialled number is applied to one of the ARS route numbers.



***** Trunk (TRK) group number: 1 through 6 / ✳ (All trunk (TRK) groups)

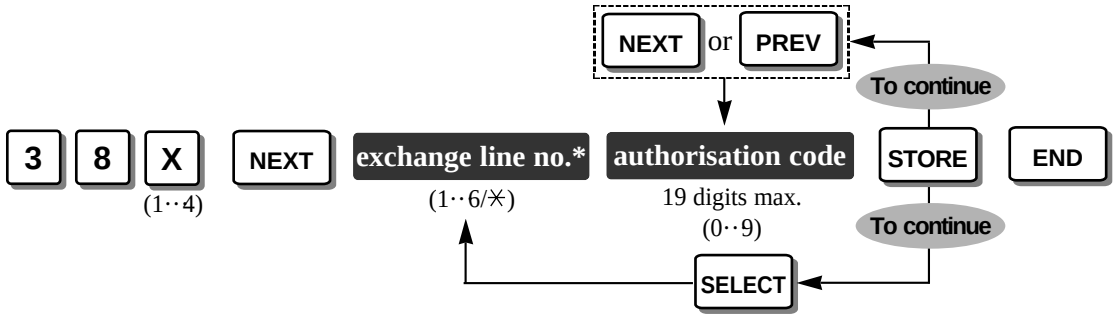
Default All routes – ✳ (All trunk (TRK) groups)

- Programs [351]-[354] "Routes 1 through 4 Selection Codes (Leading Digits)" should be considered when assigning this program.

- **Feature Reference**
  Section 3, Features
  Automatic Route Selection (ARS)

[381]-[384] *Routes 1 through 4 Authorisation Codes*

Registers an authorisation code applied to the exchange line(s).



X – Program address selection number: 1 ([351] for Route 1) / 2 ([352] for Route 2)/ 3 ([353] for Route 3) / 4 ([354] for Route 4)

***** Exchange line number: 1 through 6 / ✳ (All exchange lines)

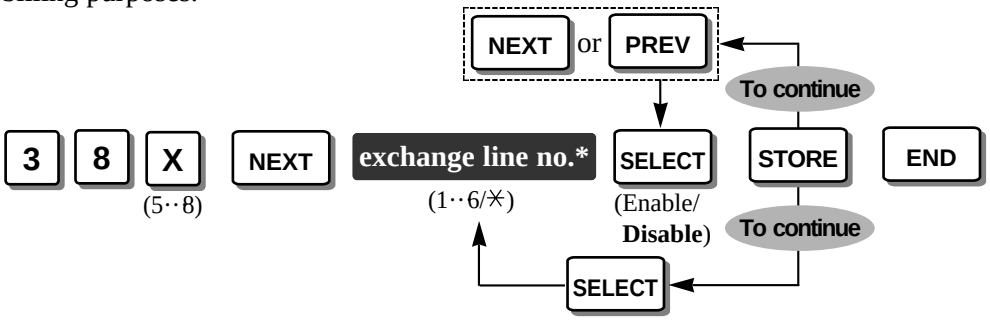
Default All exchange lines – Not stored.

!

- The registered codes are not shown on the display of a proprietary telephone and printout by program [804] "System Data Damp" after programming. "Already Set" will be shown instead of the registered codes.

[385]-[388] *Routes 1 through 4 Itemised Bill*

Enables or disables to add an extension number assigned in program [389] "Itemised Bill Code Assignment" after the authorisation code for an exchange line(s). This is useful for billing purposes.



X – Program address selection number: 5 ([385] for Route 1) / 2 ([386] for Route 2)/ 3 ([387] for Route 3) / 4 ([388] for Route 4)

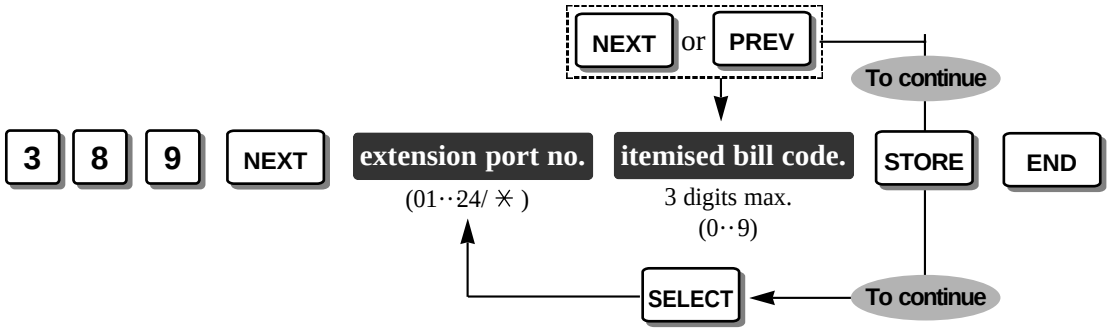
***** Exchange line number: 1 through 6 / ✳ (All exchange lines)

Default All exchange lines – Disable

- **Feature Reference**
  Section 3, Features
  Automatic Route Selection (ARS)

[389] *Itemised Bill Code Assignment*

Assigns the itemised bill code for each extension for dividing a bill.



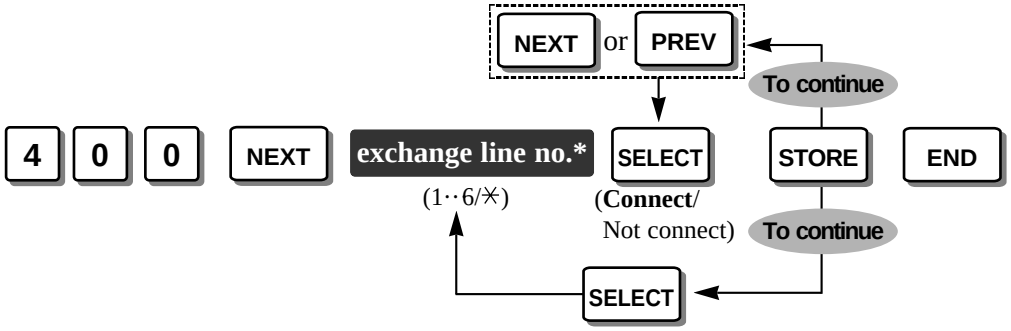
***** Extension port number: 01 through 16 / ✳ (All extension ports)

Default Extension ports 01 through 24 – 201 through 224

- **Feature Reference**
  Section 3, Features
  Automatic Route Selection (ARS)

[400] *Exchange Line Connection Assignment*

Assigns which exchange line(s) is connected to the system or not.



***** Exchange line number: 1 through 6 / ✳ (All exchange lines)

Default All exchange lines – Connect

- **Feature Reference**
  Section 3, Features
  Outside Calling

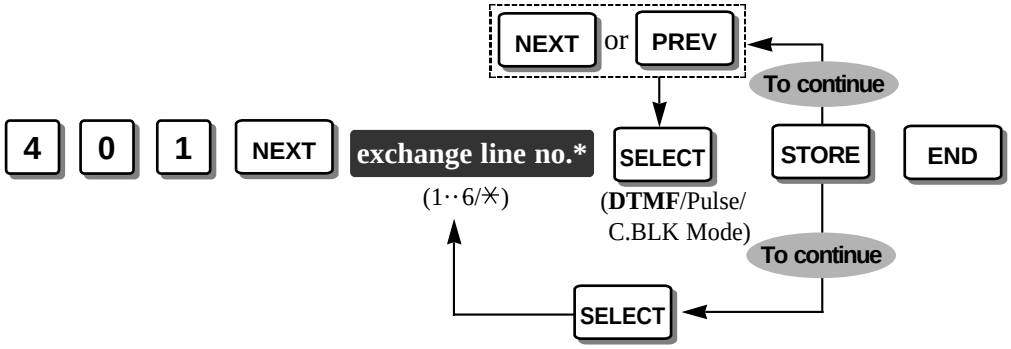
[401] *Dial Mode*

Selects the dialling mode, **DTMF**, **Pulse** or **C. BLK** (Call Blocking), for each exchange line.

DTMF: The dialling signals from an extension, either Tone or Pulse, are converted to Tone and transmitted to the Local Exchange. If the system is connected directly to the Local Exchange or installed behind a host PBX, which receives both Tone and Pulse, select this mode.

Pulse : The dialling signals from an extension, either Tone or Pulse, are converted to Pulse and transmitted to the Local Exchange.

C. BLK: If your Local Exchange can receive both DTMF and Pulse signals but the user are contracted for Pulse, select this mode. When dialling with a touch tone telephone, only Pulse signals are sent to the Local Exchange.



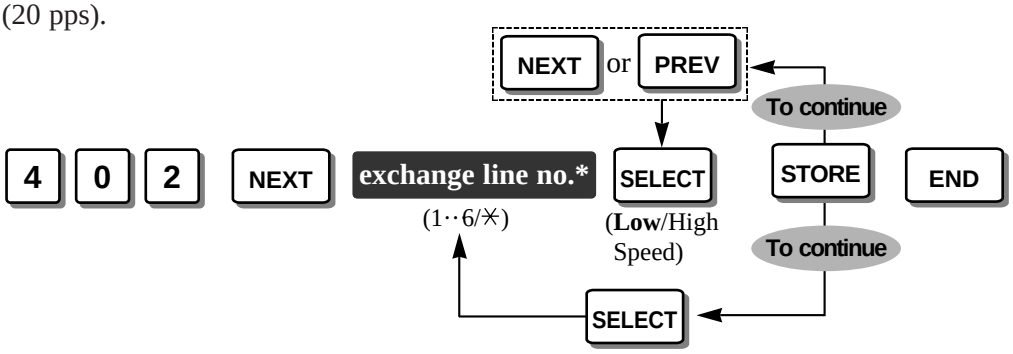
***** Exchange line number: 1 through 6 / ✳ (All exchange lines)

Default All exchange lines – DTMF Mode

- **Feature Reference**
  Section 3, Features
  Pulse to Tone Conversion

[402] *Pulse Speed Selection*

Selects a pulse rate for each exchange line which sets "Pulse Mode" or "Call block Mode" in program [401] "Dial Mode". There are 2 pulse rates, **Low Speed** (10 pps) and **High Speed** (20 pps).

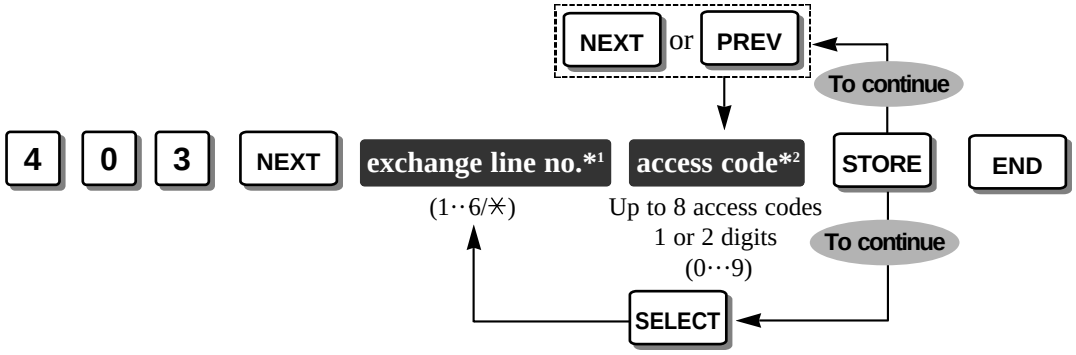


***** Exchange line number: 1 through 6 / ✳ (All exchange lines)

Default All exchange lines – Low Speed

[403] *Host PBX Access Codes*

If the system is installed behind a host PBX, each exchange line may require an access code to make an outside call. Up to 8 access codes can be stored for each exchange line. When the programmed codes are dialled, the pause time assigned in program [417] "Pause Time" is automatically inserted, and call barring is applied after the code.



*****[1] Exchange line number: 1 through 6 / ✳ (All exchange lines)

*****[2] Insert a "**,**" for each code using the [,] button on the overlay.

Example:

• Access codes 81, 82 on exchange line number 1

[4] [0] [3] [NEXT] [1] [8] [1] [,] [8] [2] [STORE] [END]

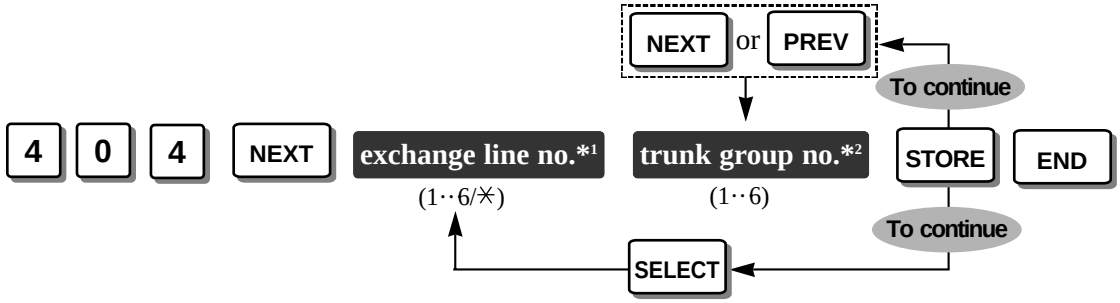
Default All exchange lines – Not stored

• To correct a wrong entry, press the CLEAR button and enter the new one.

• **Feature Reference**
Section 3, Features
Host PBX Access

[404] *Trunk Group Assignment*

Assigns a maximum 6 trunk groups. Each exchange line must be assigned to an trunk group. For example, if there are multiple telephone service companies available, exchange lines can be grouped by company.



***1** Exchange line number: 1 through 6 / ✳ (All exchange lines)
***2** Trunk (TRK) group number: 1 through 6

Default Exchange line 1 through 6 – Trunk group 1 through 6

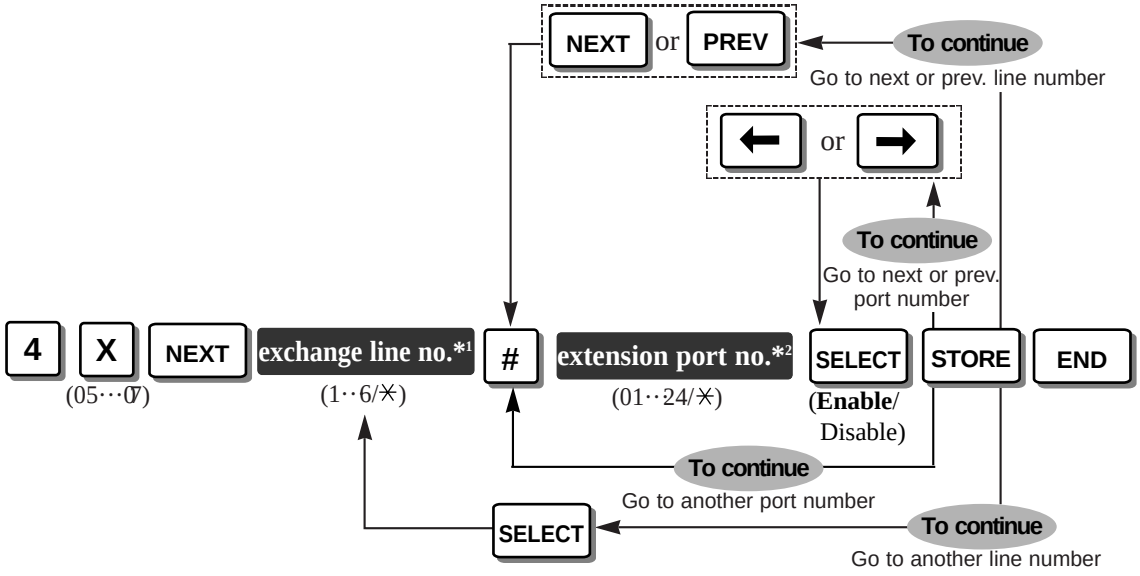
- Each exchange line can only belong to one trunk group.

- **Feature Reference**

  Section 3, Features
  Outside Calling

[405]-[407] *Flexible Outward Dialling Assignment —Day/Night/Lunch*

Determines which extension(s) can make an outside call in the day, night and/or lunch modes.



X – Program address selection number: 05 ([405] for day) / 06 ([406] for night) / 07 ([407] for lunch)

*1 Exchange line number: 1 through 6 / ✳ (All exchange lines)

*2 Extension port number: 01 through 24 / ✳ (All extension ports)

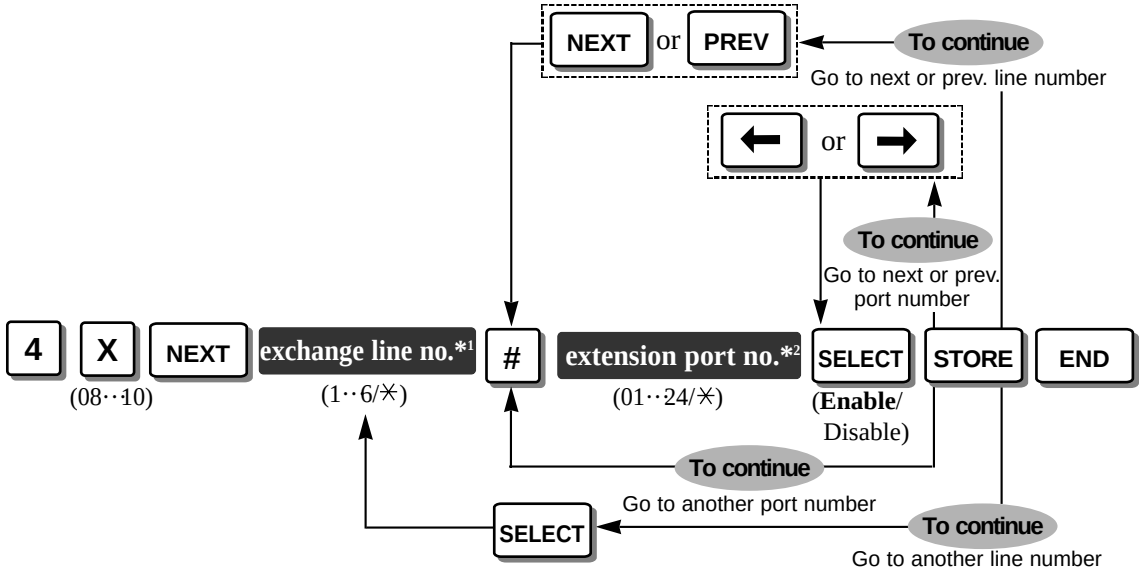
Default All exchange lines – all extension ports – Enable

- **Feature Reference**

  Section 3, Features
  Outside Calling

[408]-[410] *Flexible Ringing Assignment —Day/Night/Lunch*

Determines which extension(s) will ring for incoming outside calls in the day, night and/or lunch modes.



X – Program address selection number: 08 ([408] for day) / 09 ([409] for night) / 10 ([410] for lunch)

***1** Exchange line number: 1 through 6 ✳ (All exchange lines)

***2** Extension port number: 01 through 24 / ✳ (All extension ports)

Default All exchange lines – all extension ports – Enable

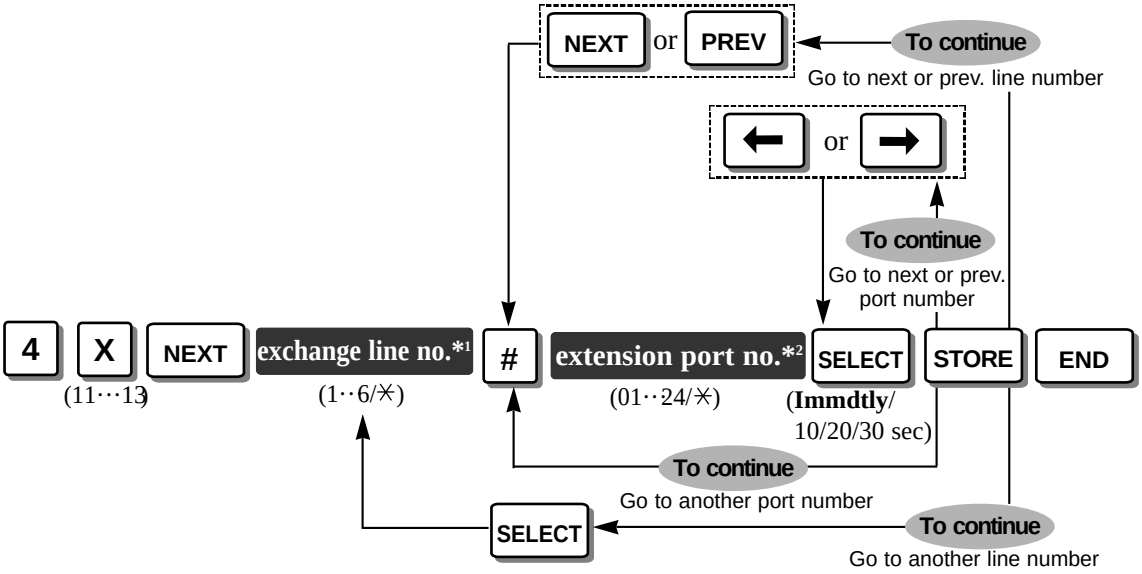
- **Feature References**

  Section 3, Features

  Exchange Line Ringing Selection, Uniform Call Distribution (UCD), Receiving Calls

[411]-[413] *Delayed Ringing Assignment —Day/Night/Lunch*

Assigns the ringing start time for extension(s) which were selected to ring in programs [408]-[410] "Flexible Ringing Assignment —Day/Night/Lunch" in the day, night and/or lunch modes.



X – Program address selection number: 11 ([411] for day) / 12 ([412] for night)/ 13 ([413] for lunch)

*1 Exchange line number: 1 through 6 / ✳ (All exchange lines)

*2 Extension port number: 01 through 24 / ✳ (All extension ports)

Default All exchange lines – all extension ports – Immediately

- **Feature Reference**

  Section 3, Features
  Receiving Calls

[414]-[416] *Exchange Line Mode —Day/Night/Lunch*

Selects the mode of an incoming outside call on each exchange Line in the day, night and lunch modes. There are the following 5 modes.

Normal: An incoming outside call will be received at the extension(s) assigned in programs [408]–[410] "Flexible Ringing Assignment — Day/Night/Lunch".

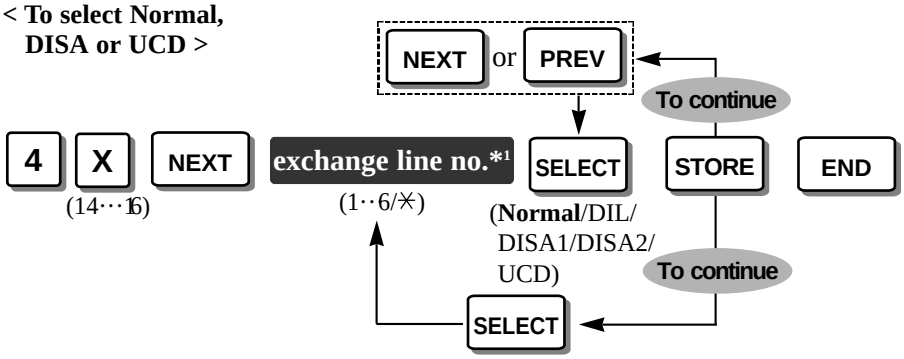
DIL: An incoming outside call will be received at the assigned extension in this program.

DISA1: An incoming outside call will be received at an extension through the DISA feature. A caller will hear a tone or an outgoing message.

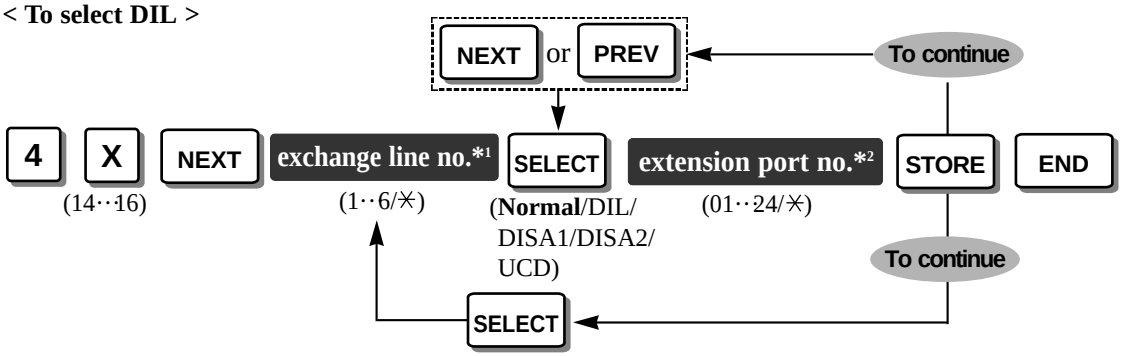
DISA2: An incoming outside call will be received at an extension through the DISA feature. A caller might hear OGM 2; for various configurations please see Cases 2, 3 and 4 in Section 3, Features "Outgoing Message (OGM).

UCD: An incoming outside call will be received at an extension through the UCD feature.

< To select Normal, DISA or UCD >



< To select DIL >



X – Program address selection number: 14 ([414] for day) / 15 ([415] for night)/ 16 ([416] for lunch)

*****1 Exchange Line number: 1 through 6 / * (All exchange lines)

*****2 Extension port number: 01 through 24 / * (All extension ports)

Default All exchange lines – Normal

- You must select “DISA1”when the optional OGM/FAX Detection card is not installed and if you want to use the internal DISA.
- When you select “UCD”, assign program [520] “UCD Group” to determine which extension group is assigned to the UCD group.
- When you select “DISA1”, “DISA2” and/or “UCD”, assign program [502] “OGM Mode Selection” to determine which OGM will be used.

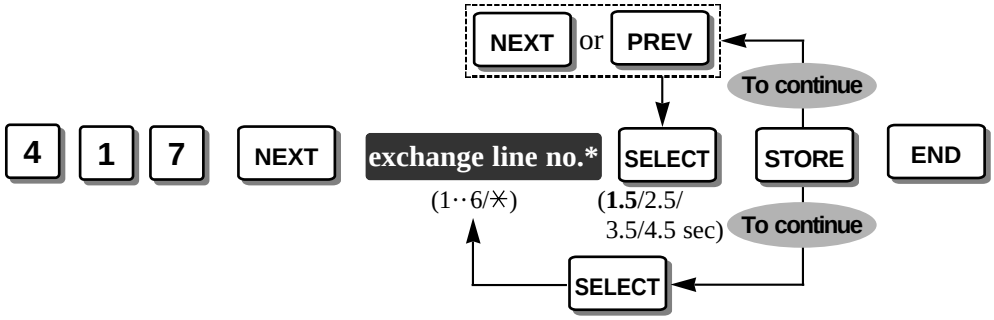
- **Feature References**

  Section 3, Features

  Direct In Line (DIL), Direct Inward System Access (DISA), Outgoing Message (OGM), Uniform Call Distribution (UCD)

[417] *Pause Time*

Assigns the length of the pause time. The programmed pause time is automatically inserted after a line access code, a host PBX access code programmed in [403] “Host PBX Access Codes” or a pause code assigned in [311] “Automatic Pause Insertion Codes” or can be manually inserted by the user using the PAUSE button.



***** Exchange line number: 1 through 6 / ✳ (All exchange lines)

Default All exchange lines – 1.5 seconds

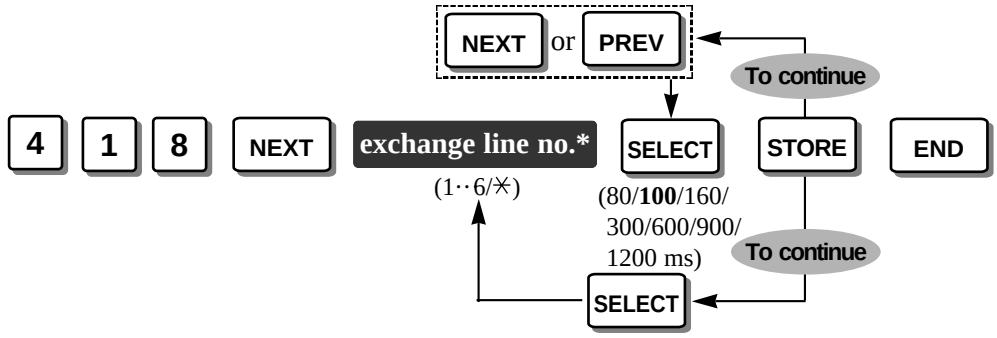
- **Feature Reference**

  Section 3, Features

  Host PBX Access

[418] *Recall Time*

Assigns the length of the recall time. If your system is installed behind a host PBX, External Feature Access is necessary to obtain its services. To enable it, select the required recall signal sending time for an exchange line.



***** Exchange line number: 1 through 6 / ✳ (All exchange lines)

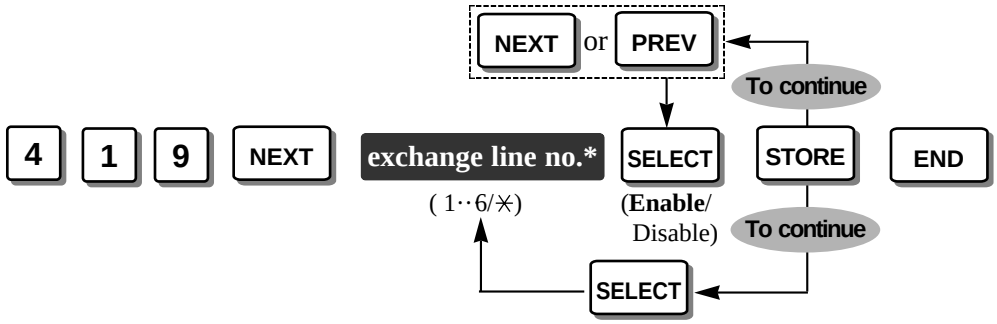
Default All exchange lines – 100 milliseconds

- **Feature References**

  Section 3, Features
  External Feature Access, Recall

[419] *Automatic Designated Exchange Line Access*

Selects which exchange line can be seized automatically when an extension user dials the Automatic Line Access number (0 or 9) assigned in program [121] “Automatic Exchange Line Access Number Selection”.



***** Exchange line number: 1 through 6 / ✳ (All exchange lines)

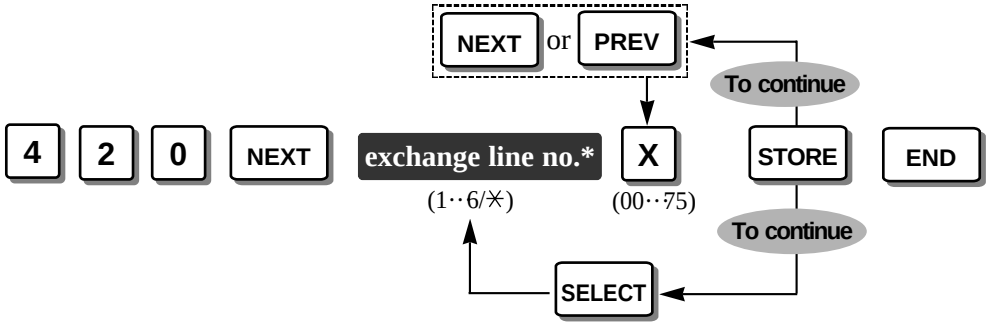
Default All exchange lines – Enable

- **Feature References**

  Section 3, Features
  Automatic Exchange Line Access Number, Outside Calling

[420] *Calling Party Control (CPC) Signal*

Assigns the required minimum duration of the Calling Party Control (CPC) signal from the Local Exchange for incoming outside calls. If programmed, the system disconnects the line when the CPC signal is detected.



***** Exchange line number: 1 through 6 / ✳ (All exchange lines)
X – CPC signal detect time selection number: **No.** = selection number
Detect time (milliseconds)

No.	Detect time	No.	Detect time	No.	Detect time	No.	Detect time
00	**Disable**	19	166	38	318	57	470
01	22	20	174	39	326	58	478
02	30	21	182	40	334	59	486
03	38	22	190	41	342	60	494
04	46	23	198	42	350	61	502
05	54	24	206	43	358	62	510
06	62	25	214	44	366	63	518
07	70	26	222	45	374	64	526
08	78	27	230	46	382	65	534
09	86	28	238	47	390	66	542
10	94	29	246	48	398	67	550
11	102	30	254	49	406	68	558
12	110	31	262	50	414	69	566
13	118	32	270	51	422	70	574
14	126	33	278	52	430	71	582
15	134	34	286	53	438	72	590
16	142	35	294	54	446	73	598
17	150	36	302	55	454	74	606
18	158	37	310	56	462	75	614

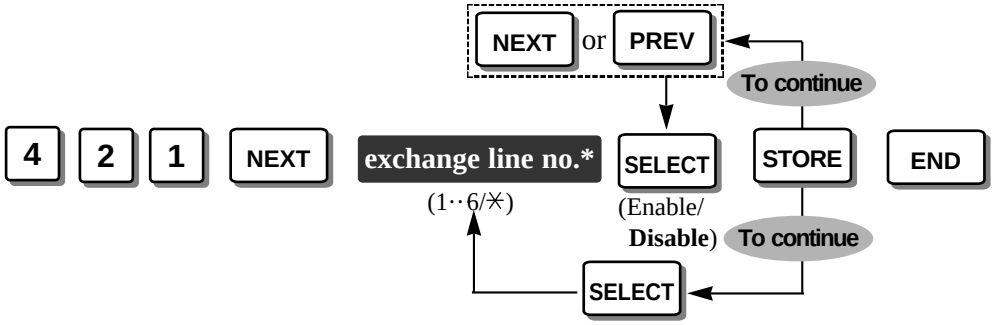
Default All exchange lines – Disable (No. 00)

- **Feature Reference**

  Section 3, Features
  Calling Party Control (CPC) Signal Detection

[421] *CPC Detection for Outgoing Calls*

Enables or disables the CPC signal detection during an outgoing outside call. If disabled, the CPC signal detection is only activated during an incoming outside call or after call hold.



***** Exchange line number: 1 through 6 / ✳ (All exchange lines)

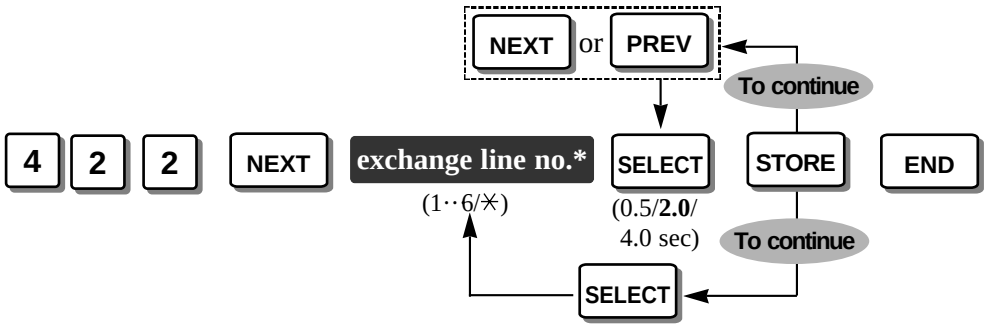
Default All exchange lines – Disable

- **Feature Reference**

  Section 3, Features
  Calling Party Control (CPC) Signal Detection

[422] *Disconnect Time*

Determines the amount of time to send the disconnect signal from the system to the Local Exchange or host PBX. The time you select must be longer than the requirement of your Local Exchange or host PBX.



***** Exchange line number: 1 through 6 / ✳ (All exchange lines)

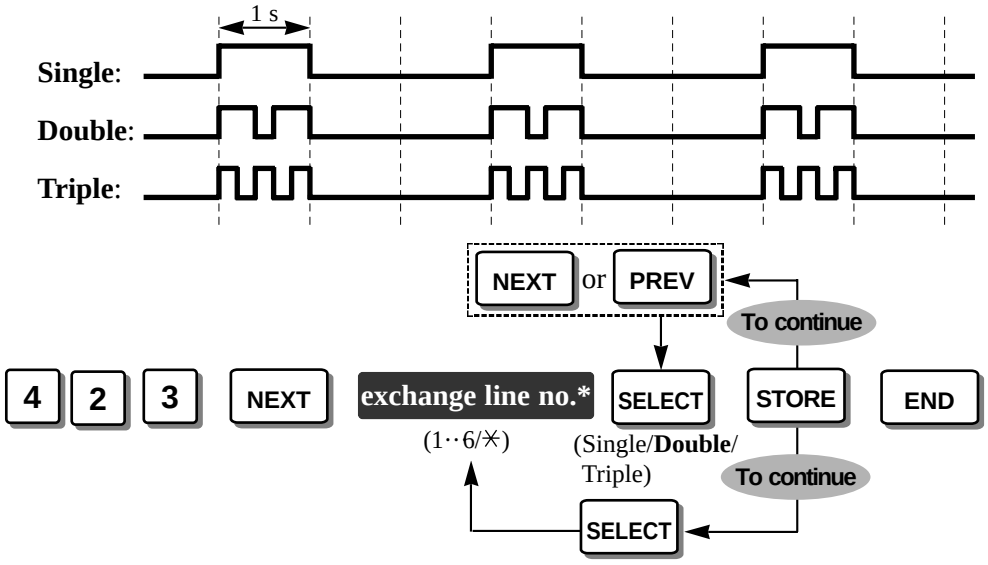
Default All exchange lines – 2.0 seconds

- **Feature Reference**

  Section 3, Features
  Recall

[423] *Exchange Line Ringing Pattern Selection*

Selects the incoming outside call ringing pattern, **Single**, **Double** or **Triple**, for each exchange line. This is useful for distinguishing private calls from business calls.



***** Exchange line number: 1 through 6 / ✳ (All exchange lines)

Default All exchange lines – Double

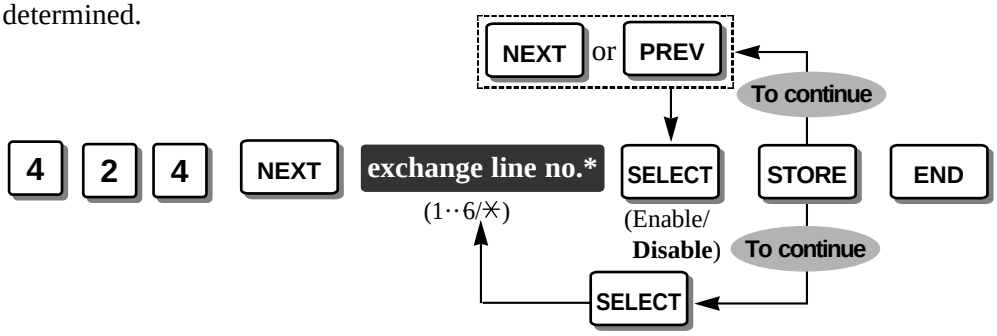
- When selecting the ring pattern illustrated above, we recommend that other ring patterns of the system be considered. Namely, please consider the settings of [115] “Extension Ringing Pattern Selection” and [706] “Doorphone Ringing/Tone Pattern Selection”.

- **Feature Reference**

  Section 3, Features
  Ringing Pattern Selection

[424] *Reverse (Polarity) Circuit Assignment*

Enables or disables detecting the reverse signal for each exchange line's polarity from the Local Exchange when making a call. If enabled, the outside call duration can be determined.



***** Exchange line number: 1 through 6 / ✳ (All exchange lines)

Default All exchange lines – Disable

- **Feature Reference**

  Section 3, Features
  Polarity Reverse Detection

[500] *DISA Incoming Dialling Mode Selection*

Selects the destination of an incoming outside call via the DISA feature when you select "DISA 1" or "DISA 2" in programs [414]-[416] "Exchange Line Mode –Day/Night/Lunch", **Without AA** (auto attendant) or **With AA** . If you select "With AA", assign the next program [501] "DISA Built-in Auto Attendant".

Without AA: Available destinations are: extension numbers assigned in program [009] "Extension Number Assignment" and the operator number (0 or 9).

With AA: Available destinations are: numbers available in the "Without AA" mode, and numbers (0 through 9) assigned in program [501].

5 0 0 NEXT SELECT STORE END

(**Without AA**/ With AA)

Default Without AA

- For example: in the "With AA" mode, if a number is not dialled within the programmed time in [517] "DISA AA Wait Time" after dialling 1, the call is received at the DISA built-in auto attendant number 1.
- In the "With AA" mode, if 0 or 9 is not assigned in program [501], the system recognises them as a the operator number.

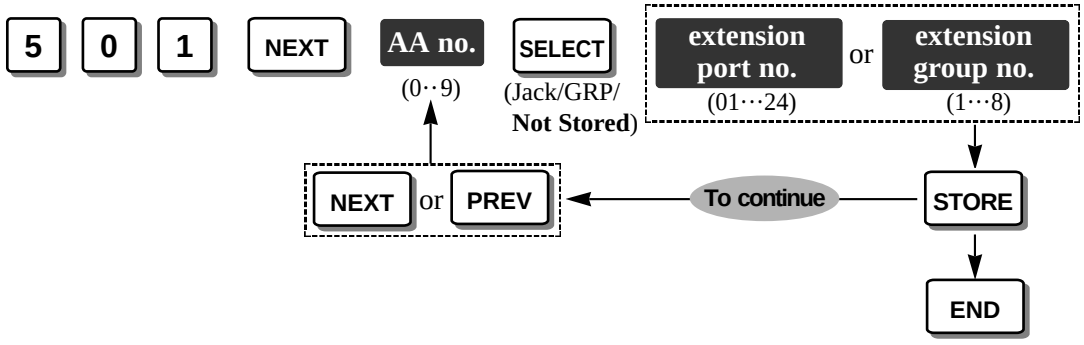
- **Feature Reference**

  Section 3, Features

  Direct Inward System Access (DISA)

[501] *DISA Built-in Auto Attendant*

Assigns a maximum of 10 DISA built-in auto attendant numbers when "With AA" is selected in program [500] "DISA Incoming Dialling Mode Selection". The extension numbers assigned in program [009] "Extension Number Assignment", and the extension group numbers assigned in program [600] "Extension Group Assignment" can be assigned as a 1 digit number and used as DISA built-in auto attendant numbers.



Default All auto attendant numbers – Not stored

- If you would like to use the operator number in the "With AA" mode, do not assign auto attendant number(s) which correspond to the operator number (0 or 9).

- **Feature Reference**

  Section 3, Features
  Direct Inward System Access (DISA)

[502] *OGM Mode Selection*

Selects how the 2 outgoing messages (OGM1 and OGM2) are used, **MODE1** through **MODE6**.

Mode	OGM1	OGM2	Description
1	DISA1	DISA1	The system can receive 2 incoming calls via the DISA feature at the same time. This is useful when receiving many calls.
2	DISA1	DISA2	An example: DISA1 is used in the day mode and DISA2 is used in the night mode.
3	UCD	UCD	The system can hold up to 2 incoming calls via the UCD feature at the same time until any extension is available.
4	UCD	UCD-END	The system disconnects an incoming call via the UCD feature when the assigned waiting time in [521] "UCD Busy Waiting Time" expires.
5	UCD	DISA1	An example: UCD is used in the day mode and DISA1 is used in the night mode.
6	UCD	DISA	The system leads an incoming call via the UCD feature to the DISA feature by OGM2 when the assigned waiting time in [521] "UCD Busy Waiting Time" expires and "Intercept" is selected in [523] "UCD Busy Mode".

5 0 2 NEXT SELECT STORE END

(**MODE 1**/ 2/3/4/5/6)

Default MODE1

- Programs [414]-[416] "Exchange Line Mode – Day/Night/Lunch" are used to assign "DISA1", "DISA2" or "UCD" to each exchange line according to this assignment.
- UCD-END is automatically used when "UCD" is assigned in programs [414]-[416], "Disconnect" is selected in program [523] "UCD Busy Mode", and "MODE4" is selected in this program.
- DISA is automatically used when "UCD" is assigned in programs [414]-[416], "Intercept" is selected in program [523], and "MODE6" is selected in this program.
- If the optional OGM/FAX Detection card is not installed, this assignment should be "MODE1".

- **Feature References**

  Section 3, Features

  Direct Inward System Access (DISA), Outgoing Message (OGM), Uniform Call Distribution (UCD)

[503] *FAX Connection* *1

Assigns one extension which can receive facsimile data when the system receives a FAX (CNG) tone via the DISA feature.

5 0 3 NEXT **extension port no.** STORE END
(01··24)

Default Disable (Not assigned)

- The assigned extension will automatically have the Data Line Security feature set.
- To unassign an extension port number, press the CLEAR button in the extension port number step.

- **Feature References**
  Section 3, Features
  Data Line Security, Direct Inward System Access (DISA)

[504] *DISA Delayed Answer Time*

Sets the time from a call being received and answered with the DISA feature.

5 0 4 NEXT SELECT STORE END
(0/**3**/6/12 sec)

Default 3 seconds

- **Feature Reference**
  Section 3, Features
  Direct Inward System Access (DISA)

[505] *DISA Waiting Time after OGM* *1

Assigns the length of time the system keeps detecting the DTMF signals or FAX (CNG) tone after the DISA outgoing message is completed.

5 0 5 NEXT SELECT STORE END
(0/**5**/10/15 sec)

Default 5 seconds

- **Feature Reference**
  Section 3, Features
  Direct Inward System Access (DISA)

*1: Required only when the optional OGM/FAX Detection Card is installed.

[506] *DISA Busy Mode*

Selects the operation when a called extension or all called extensions in an extension group enabled in program [100] "Hunting Group Set" via the DISA feature is/are busy.
Disconnect, **Call Waiting** or **DISA2** is available.

Disconnect: The call is disconnected after the busy tone.
Call Waiting: A call waiting tone is sent to the called extension or first called extension in the hunting group.
DISA2: OGM2 is sent to the caller and the system waits for another destination when the first destination is busy.

5 0 6 NEXT SELECT STORE END
(**Disconnect**/ Call Waiting/ DISA2)

Default Disconnect

- Program [502] "OGM Mode Selection" should be "MODE2", if "DISA2" was selected in this program.

- **Feature References**
  Section 3, Features
  Direct Inward System Access (DISA), Outgoing Message (OGM)

[507] *DISA Intercept Mode*

Selects the operation when a called extension or extension group via the DISA feature does not answer a call within the length of time programmed in [508] "DISA Ringing Time before Intercept". **Intercept** or **Disconnect** is available.

Intercept: The call is redirected depending on [408]-[410] "Flexible Ringing Assignment–Day/Night/Lunch" (Intercept Routing – No Answer feature). This is useful for business use. For example, the call is forwarded to the operator or a Voice Processing System automatically.
Disconnect: The call is disconnected. This is useful for users who do not want to forward the call, for example, to a home.

5 0 7 NEXT SELECT STORE END
(**Intercept**/ Disconnect)

Default Intercept

- **Feature References**
  Section 3, Features
  Direct Inward System Access (DISA), Intercept Routing, Voice Mail Integration for KX-TVP100

[508] *DISA Ringing Time before Intercept*

Assigns the length of time for the Intercept Routing – No Answer feature (☞ [507] "DISA Intercept Mode", Intercept). When the time expires the system starts to redirect the call to the programmed extension(s).

5 0 8 NEXT SELECT STORE END

(10/**20**/30/ 40/60/120 sec)

Default 20 seconds

- **Feature References**

  Section 3, Features

  Direct Inward System Access (DISA), Intercept Routing

[509] *DISA Ringing Time after Intercept*

Assigns the length of time to call the extension(s) where a call is redirected by the Intercept Routing – No Answer feature(☞ [507] "DISA Intercept Mode", Intercept) after the time programmed in [508] "DISA Ringing Time before Intercept" expires. If the call is not answered within the programmed time, the call will be disconnected.

5 0 9 NEXT SELECT STORE END

(10/**20**/30/ 40/60/120 sec)

Default 20 seconds

- **Feature References**

  Section 3, Features

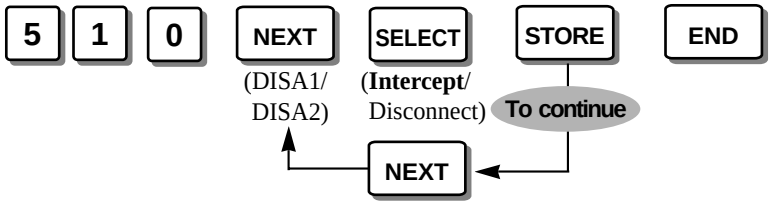
  Direct Inward System Access (DISA), Intercept Routing

[510] *DISA No Dial Mode*

Selects the operation when the system does not receive either DTMF signals or a FAX (CNG) tone after a programmed length of time. If the optional card is installed, then use program [505] "DISA Waiting Time after OGM". If the optional card is not installed, then use program [515] "Intercept Time for Internal DISA". **Intercept** or **Disconnect** is available.

Intercept: The call is directed depending on programs [408]-[410] "Flexible Ringing Assignment–Day/Night/Lunch" (Intercept Routing – No Answer feature). The destination telephone(s) will ring for the time programmed in [509] "DISA Ringing Time after Intercept".

Disconnect: The call is disconnected.



Default DISA 1 and DISA 2 – Intercept

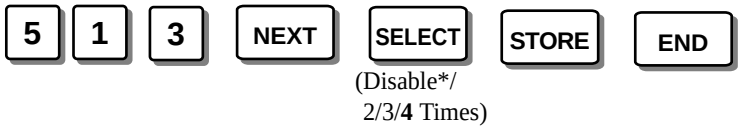
- **Feature References**

  Section 3, Features

  Direct Inward System Access (DISA), Intercept Routing

[513] *Cyclic Tone Detection**[1]

Assigns the number of times a cyclic tone is detected while the DISA outgoing message is sent so that the system can recognise the end of the DISA call.



***** Disable (Does not detect)

Default 4 Times

- **Feature References**

  Section 3, Features

  Direct Inward System Access (DISA), Uniform Call Distribution (UCD)

*[1]: Required only when the optional OGM/FAX Detection Card is installed.

[514] *FAX Tone Detection**[1]

Sets the number of times the FAX (CNG) tone must be detected while the DISA outgoing message is sent before the system recognises the incoming signal as facsimile data.

5 1 4 NEXT SELECT STORE END

(**1 Time**/2 Times)

Default 1 Time

- The extension which can receive facsimile data must be assigned in program [503] "FAX Connection"

- **Feature Reference**
  Section 3, Features
  Direct Inward System Access (DISA)

[515] *Intercept Time for Internal DISA*

Assigns the length of time the system keeps detecting DTMF signals after a call is received at the internal DISA. If the system does not receive DTMF signals within the programmed time, the call will be intercepted or disconnected according to program [510] "DISA No Dial Mode".

5 1 5 NEXT SELECT STORE END

(**3**/6/9 sec)

Default 3 seconds

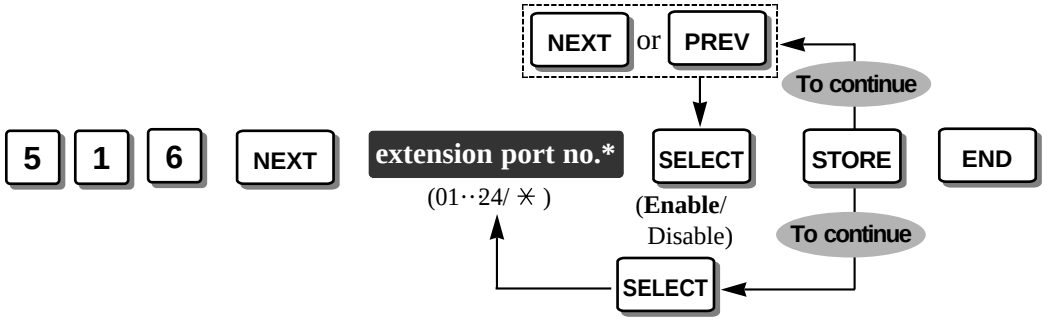
- A cyclic tone and FAX (CNG) tone cannot be detected by the internal DISA.

- **Feature Reference**
  Section 3, Features
  Direct Inward System Access (DISA)

*[1]: Required only when the optional OGM/FAX Detection Card is installed.

[516] *DISA Incoming Assignment*

Enables or disables each extension to receive an outside call via the DISA feature. If a DISA call is received at a disabled extension, the DISA caller will hear a reorder tone and the call will be disconnected automatically. For example, it may be convenient to disable the president's extension.



***** Extension port number: 01 through 24 / ✳ (All extension ports)

Default All extension ports – Enable

- If a call via the DISA feature is received by an extension group, this program will not work for extensions in that extension group. In this case, disabled extensions will still ring.

- **Feature Reference**
  Section 3, Features
  Direct Inward System Access (DISA)

[517] *DISA AA Wait Time*

Selects the time that the system waits for a second digit entry. If the programmed time expires, the system will assume that the first digit is a DISA built-in auto attendant number, if a number is assigned in program [501] "DISA Built-in Auto Attendant". For example, if a number is not dialled within the programmed time after dialling 1, the system will assume that "1" is the auto attendant number.

Default 2 seconds

- **Feature Reference**
  Section 3, Features
  Direct Inward System Access (DISA)

[519] *DISA OGM Mute Time*

Assigns the length of time from answering a call with the DISA feature and sending the DISA outgoing message or a beep. During the assigned length of time, the system will not receive DTMF signals.

5 1 9 NEXT SELECT STORE END
(**0**/2/4/6 sec)

Default 0 second

- **Feature Reference**
  Section 3, Features
  Direct Inward System Access (DISA)

[520] *UCD Group**[1]

Assigns one extension group which works as the UCD group.

5 2 0 NEXT **extension group no.** STORE END
(1···8)

Default Extension group number 1

- **Feature Reference**
  Section 3, Features
  Uniform Call Distribution (UCD)

[521] *UCD Busy Waiting Time**[1]

Assigns the length of time the system holds an incoming outside call via the UCD feature when all extensions in the UCD group are busy. When the programmed time expires, the call will be intercepted or disconnected according to program [523] "UCD Busy Mode".

5 2 1 NEXT **waiting time*** SELECT STORE END
(**min**/sec)

* Waiting time: 1 through 32 (minutes) / 1 through 59 (seconds)

Default 10 minutes

- **Feature Reference**
  Section 3, Features
  Uniform Call Distribution (UCD)

*[1]: Required only when the optional OGM/FAX Detection Card is installed.

[522] *UCD OGM Message Interval Time**[1]

Assigns interval time between sending UCD outgoing messages to an incoming outside call via the UCD feature when all extensions in the UCD group are busy. The UCD outgoing message is repeated during the time programmed in [521] "UCD Busy Waiting Time".

5 2 2 NEXT SELECT STORE END

(30 sec/**1**/ 1.5/2 min)

Default 1 minute

- **Feature Reference**
  Section 3, Features
  Uniform Call Distribution (UCD)

[523] *UCD Busy Mode**[1]

Selects the operation when the length of time programmed in [521] "UCD Busy Waiting Time" expires. **Intercept** or **Disconnect** is available.

Intercept: The call will be redirected depending on programs [408]-[410] "Flexible Ringing Assignment–Day/Night/Lunch" (Intercept Routing feature). The extension which receives a redirected call rings during the length of time programmed in [526] "UCD Ringing Time after Intercept".

Disconnect: The call will be disconnected immediately.

5 2 3 NEXT SELECT STORE END

(**Intercept**/ Disconnect)

Default Intercept

- The above-mentioned intercept only occurs when "MODE 3" or "MODE 5" is selected in program [502] "OGM Mode Selection". If "MODE 4" is selected, the call will be disconnected after the UCD-END outgoing message. If "MODE 6" is selected and "Intercept" is assigned in this program, the call will go to the DISA and OGM2 will be heard by the caller.

- **Feature References**
  Section 3, Features
  Intercept Routing, Uniform Call Distribution (UCD)

*[1]: Required only when the optional OGM/FAX Detection Card is installed.

[524] *UCD Intercept Mode**[1]

Selects the operation when all extensions in the UCD group do not answer an outside call via the UCD feature within the length of time programmed in [525] "UCD Ringing Time before Intercept". **Intercept** or **Disconnect** is available.

Intercept: The call is redirected depending on programs [408]-[410] "Flexible Ringing Assignment–Day/Night/Lunch" (Intercept Routing – No Answer feature).

Disconnect: The call is disconnected.

5 2 4 NEXT SELECT (**Intercept**/ Disconnect) STORE END

Default Intercept

- **Feature References**
  Section 3, Features
  Intercept Routing, Uniform Call Distribution (UCD)

[525] *UCD Ringing Time before Intercept**[1]

Assigns the length of time for the Intercept Routing – No Answer feature (☞ [524] "UCD Intercept Mode", Intercept). When the time expires, the system starts to redirect the call to the programmed extension(s).

5 2 5 NEXT SELECT (10/**20**/30/ 40/60/120 sec) STORE END

Default 20 seconds

- **Feature References**
  Section 3, Features
  Intercept Routing, Uniform Call Distribution (UCD)

[526] *UCD Ringing Time after Intercept**[1]

Assigns the length of time to call the extension(s) where a call is redirected by the Intercept Routing – No Answer feature (☞ [524] "UCD Intercept Mode", Intercept) after the time programmed in [525] "UCD Ringing Time before Intercept" expires.

5 2 6 NEXT SELECT (10/**20**/30/ 40/60/120 sec) STORE END

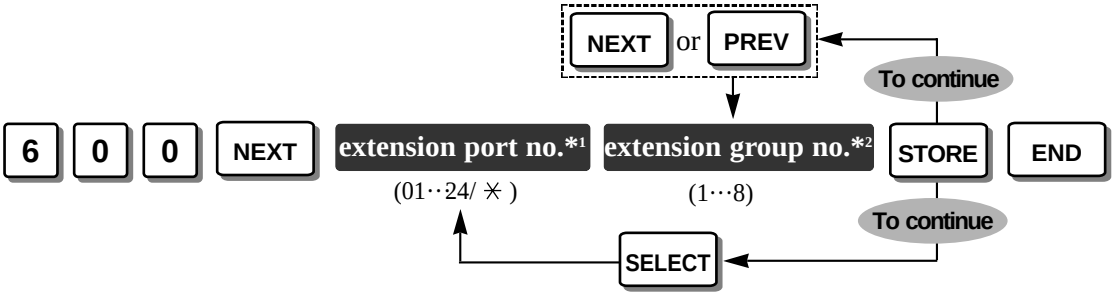
Default 20 seconds

- **Feature References**
  Section 3, Features
  Intercept Routing, Uniform Call Distribution (UCD)

*[1]: Required only when the optional OGM/FAX Detection Card is installed.

[600] *Extension Group Assignment*

Assigns an extension group for each extension. For example: by department or floor.



*1 Extension port number: 01 through 24 / ✳ (All extension ports)
*2 Extension group number: 1 through 8

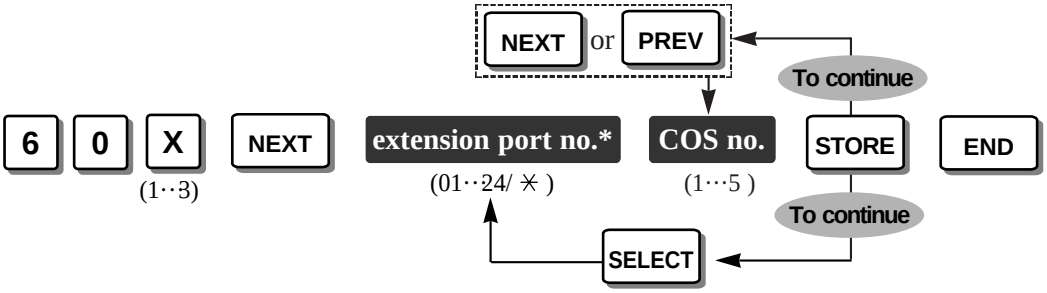
Default All extension ports – Extension group 1

- Every extension should belong to an extension group, but cannot belong to more than one group.

- **Feature References**
  Section 3, Features
  Extension Group, Extension Hunting

[601]-[603] *Call Barring – Class of Service Assignment —Day/Night/Lunch*

Programs a class of service (COS) in the day, night and/or lunch modes for each extension. There are 5 classes of service available for each extension.



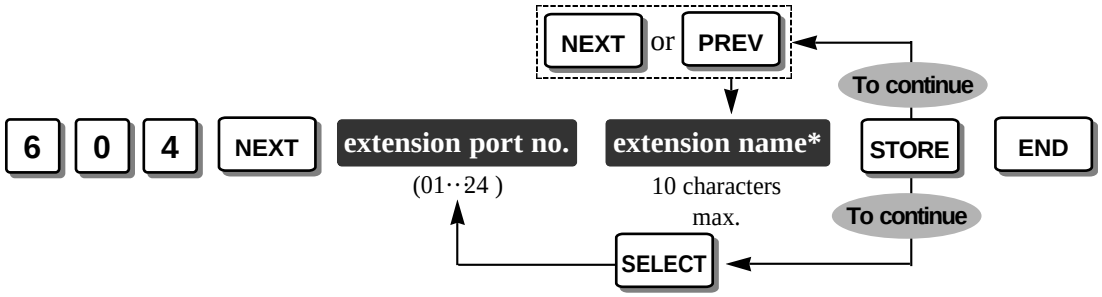
X – Program address selection number: 1 ([601] for day) / 2 ([602] for night)/ 3 ([603] for lunch)
***** Extension port number: 01 through 24 / ✳ (All extension ports)

Default All extension ports – COS-1

- **Feature Reference**
  Section 3, Features
  Call Barring

[604] *Extension Name Setting*

Assigns a name to each extension which will be displayed when making or receiving an intercom call.



***** Extension name:

Combination Table

Keys \ Pressing SELECT (Times)	0	1	2	3	4	5	6
1	1	Q	q	Z	z	!	?
2	2	A	a	B	b	C	c
3	3	D	d	E	e	F	f
4	4	G	g	H	h	I	i
5	5	J	j	K	k	L	l
6	6	M	m	N	n	O	o
7	7	P	p	R	r	S	s
8	8	T	t	U	u	V	v
9	9	W	w	X	x	Y	y
0	0		.	,	’	:	;
✳	✳	”	+	-	=	<	>
#	#	$	%	&	@	(	)

<Example>

— To enter “Mike”;

1. Press 6 and then press the SELECT button once to enter “M”.
2. Press 4 and then press the SELECT button 6 times to enter “i”.
3. Press 5 and then press the SELECT button 4 times to enter “k”.
4. Press 3 and then press the SELECT button 4 times to enter “e”.

Default All extension ports – Not stored.

- To erase all letters, press the CLEAR button. To erase 1 letter, press ← .
- Each name has a maximum of 10 characters.

- **Feature References**

  Section 3, Features

  Intercom Calling

[605] *Account Code Entry Mode*

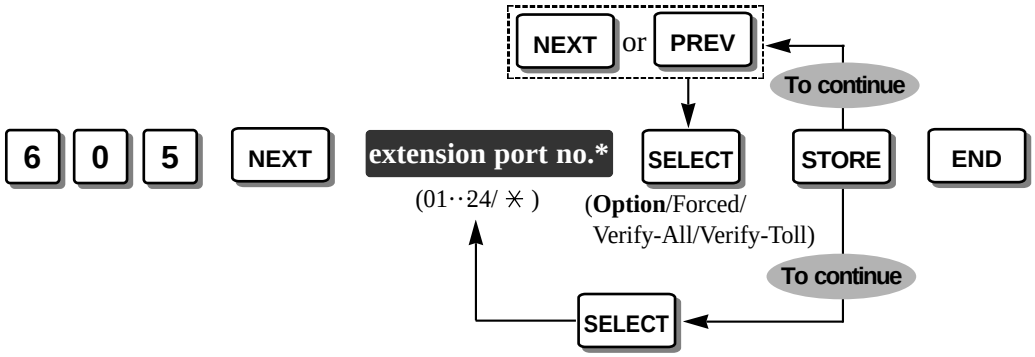
Selects the account code input mode, **Option**, **Forced**, **Verify–All** or **Verify–Toll (Call Barring)**, for each extension port. This feature displays the account code of the called or calling party on the SMDR.

Option: The user can enter any account code, if needed.

Forced: The user must always enter an account code. The code can be any number.

Verify–All: The user must always enter an assigned account code in program [310] "Account Codes" to make an outside call.

Verify–Toll (Call Barring): The user can enter an assigned account code in program [310] to override call barring. The call barring COS numbers 3 through 5 will be changed temporarily to the COS number 2. (The COS numbers 1 and 2 will not be changed.)



***** Extension port number: 01 through 24 / ✳ (All extension ports)

Default All extension ports – Option

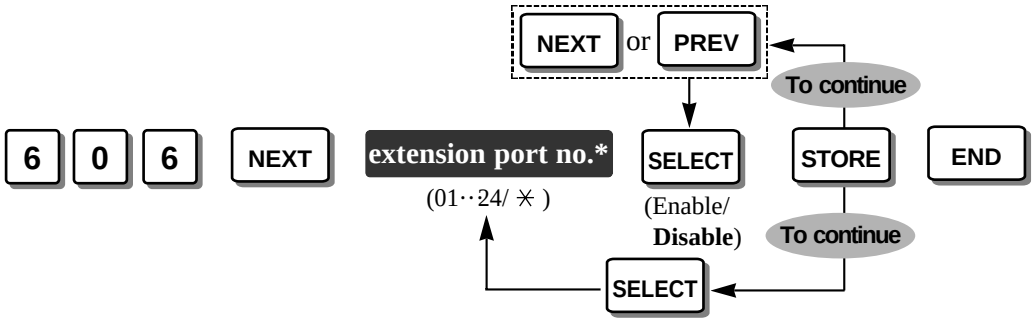
- **Feature References**

  Section 3, Features

  Account Code Entry, Call Barring Override by Account Codes

[606] *Call Transfer to an Exchange Line*

Enables or disables transferring an intercom or outside call to any exchange line manually for each extension.



***** Extension port number: 01 through 24 / ✳ (All extension ports)

Default All extension ports – Disable

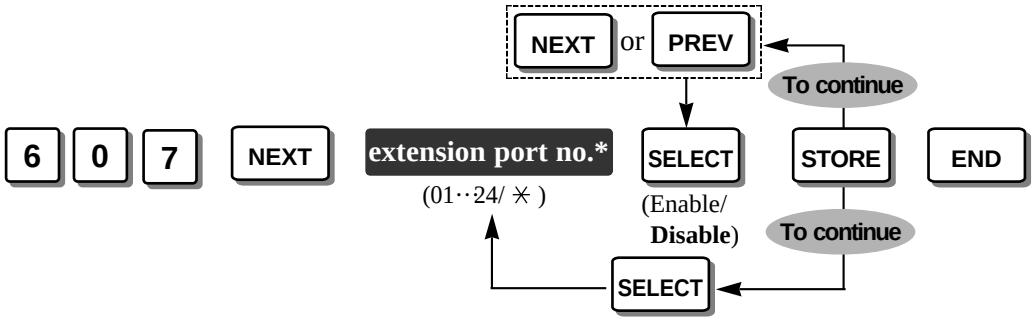
- **Feature References**

  Section 3, Features

  Call Transfer – to Exchange Line, Conference (3-party)

[607] *Call Forwarding to an Exchange Line*

Enables or disables automatically forwarding an incoming intercom or outside call to any exchange line for each extension.



***** Extension port number: 01 through 24 / ✳ (All extension ports)

Default All extension ports – Disable

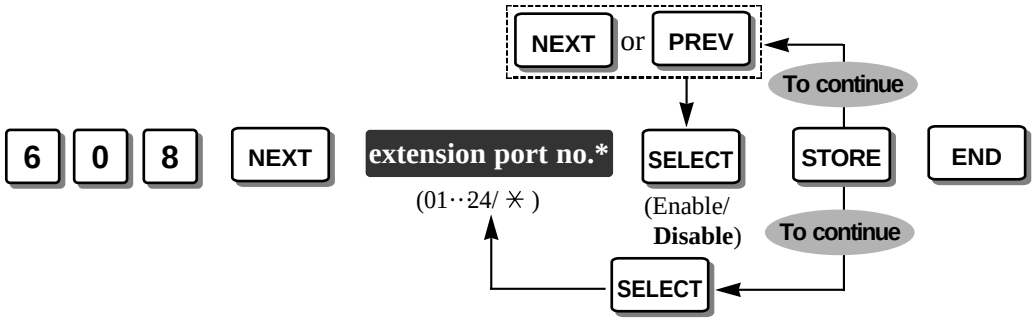
- **Feature Reference**

  Section 3, Features

  Call Forwarding

[608] *Executive Busy Override*

Enables or disables using the Executive Busy Override feature at each extension. If enabled, an extension user can interrupt an established call.



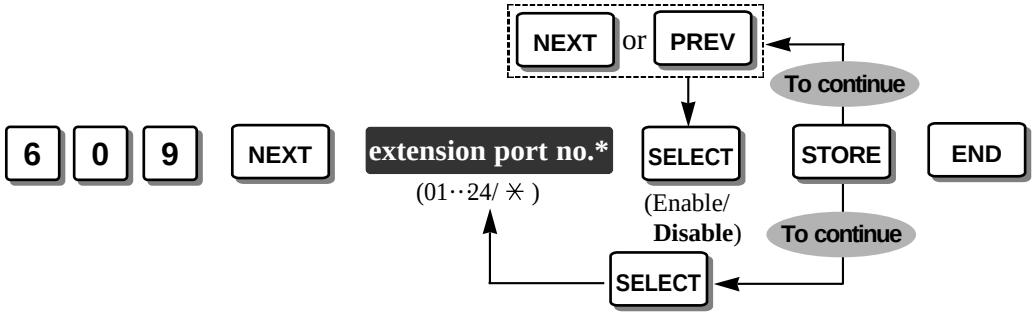
***** Extension port number: 01 through 24 / ✳ (All extension ports)

Default All extension ports – Disable

- **Feature Reference**
  Section 3, Features
  Executive Busy Override

[609] *Do Not Disturb Override*

Enables or disables using the Do Not Disturb Override feature at each extension. If enabled, an extension user can ring an extension which has set the Do Not Disturb feature.



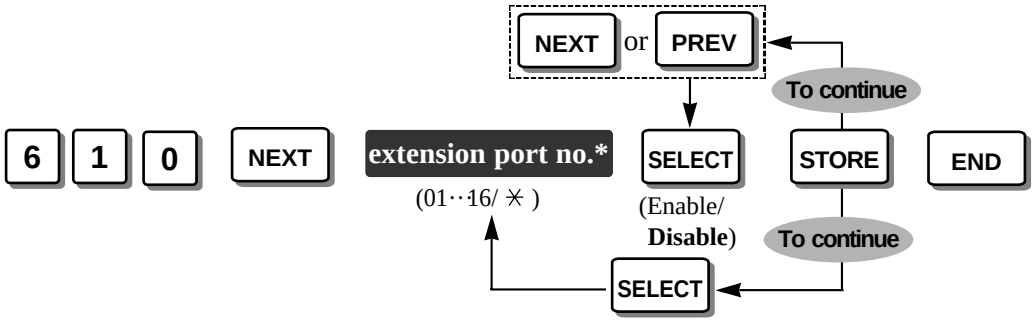
***** Extension port number: 01 through 24 / ✳ (All extension ports)

Default All extension ports – Disable

- **Feature Reference**
  Section 3, Features
  Do Not Disturb (DND)

[610] *Parallelled Telephone Connection*

Enables or disables a single line telephone (SLT) to be connected in parallel with a proprietary telephone.



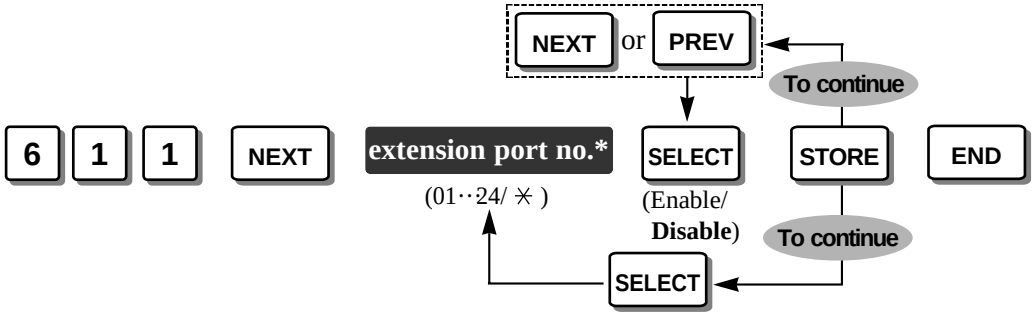
***** Extension port number: 01 through 16 / ✳ (All extension ports)

Default All extension ports – Disable

- **Feature Reference**
  Section 3, Features
  Parallelled Telephone Connection

[611] *TAM (Telephone Answering Machine) Extension*

Assigns the port number of an extension connected to a telephone answering machine (TAM) to activate the Call Retrieving from TAM feature.



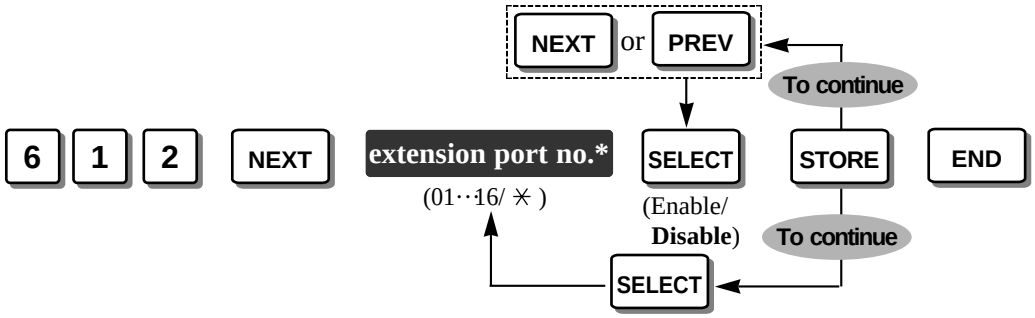
***** Extension port number: 01 through 24 / ✳ (All extension ports)

Default All extension ports – Disable (not connected)

- **Feature Reference**
  Section 3, Features
  Call Pickup

[612] *Room Monitor Assignment*

Enables or disables which extension(s) can be monitored using the Room Monitor feature.



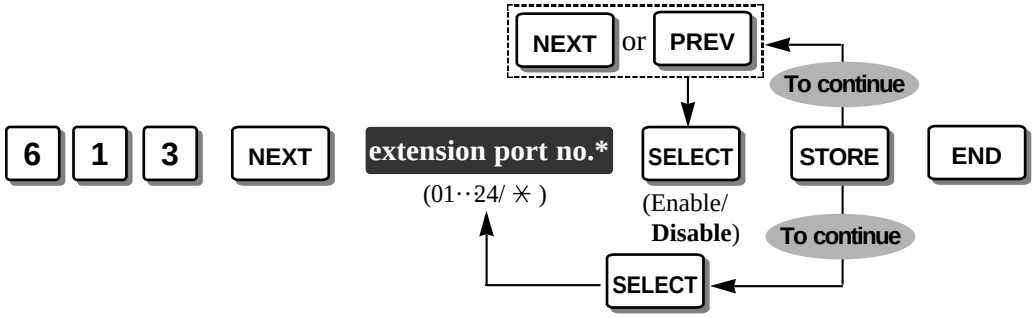
***** Extension port number: 01 through 16 / ✳ (All extension ports)

Default All extension ports – Disable (Cannot be monitored.)

- **Feature Reference**
  Section 3, Features
  Room Monitor

[613] *Exchange Line Duration Time Limit Selection*

Enables or disables the time limit programmed in [212] "Exchange Line Duration Time Limit" for each extension.



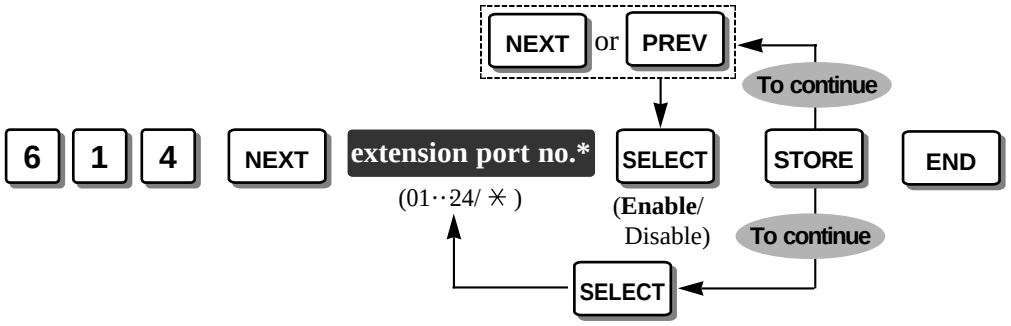
***** Extension port number: 01 through 24 / ✳ (All extension ports)

Default All extension ports – Disable

- **Feature Reference**
  Section 3, Features
  Limited Call Duration

[614] *Internal Pulse Detection*

Enables or disables connecting a single line telephone (SLT) to receive pulse signals for each extension.



***** Extension port number: 01 through 24 / ✳ (All extension ports)

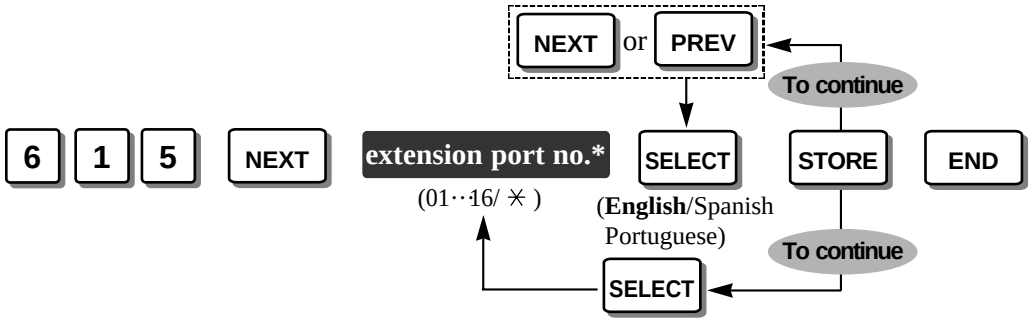
Default All extension ports – Enable

- If you select “MODE 1” in program [207] “Recall Timing Range Selection” and “Enable” in this program, the system will distinguish between a pulse signal and hooking depending on the situation. When you select “Disable” in this program, if “1” is dialled during the pulse mode, the system will regard it as hooking and all other numbers will be disregarded.

- **Feature Reference**
  Section 3, Features
  Recall Button on a Single Line Telephone

[615] *LCD Language Assignment*

Selects the language, **English**, **Spanish** or **Portuguese**, shown on the LCD display of a proprietary telephone on an extension basis. The selected language is shown during operation and Proprietary Telephone Settings.



***** Extension port number: 01 through 16 / ✳ (All extension ports)

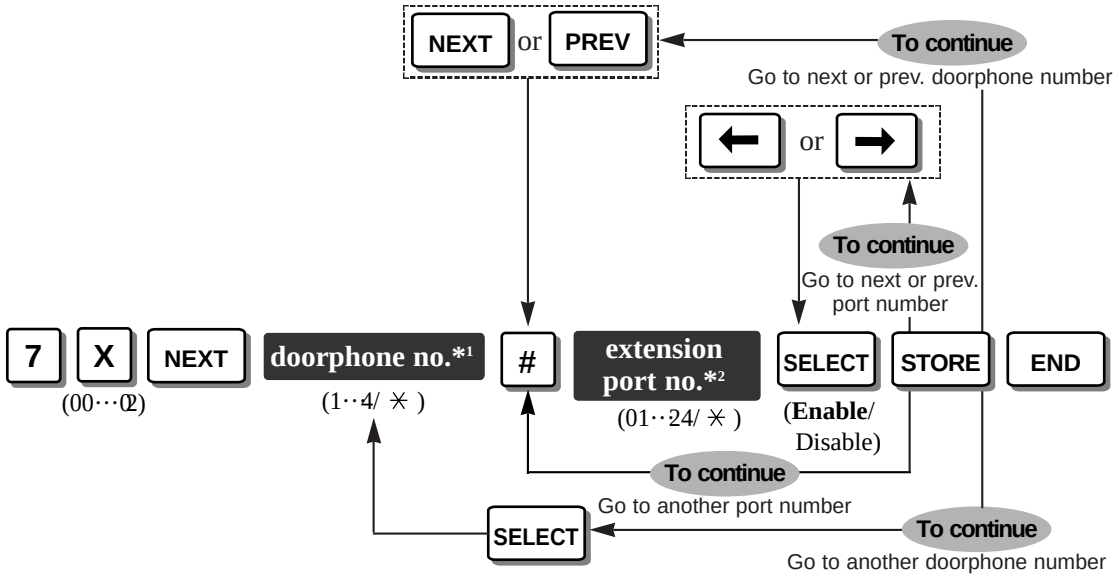
Default All extension ports — English

- The language used for the SMDR printout is assigned in program [806] “SMDR Language Assignment”.

- **Feature Reference**
  Section 3, Features
  Language Selection

[700]-[702] *Doorphone Ringing Assignment—Day/Night/Lunch*

Enables or disables receiving a call from up to 4 doorphones in the day, night and/or lunch modes for each extension.



X – Program address selection number: 00 ([700] for day) / 01 ([701] for night) / 02 ([702] for lunch)

***1** Doorphone number: 1 through 4 / ✳ (All doorphones)

***2** Extension port number: 01 through 24 / ✳ (All extension ports)

Default All doorphones – all extension ports – Enable

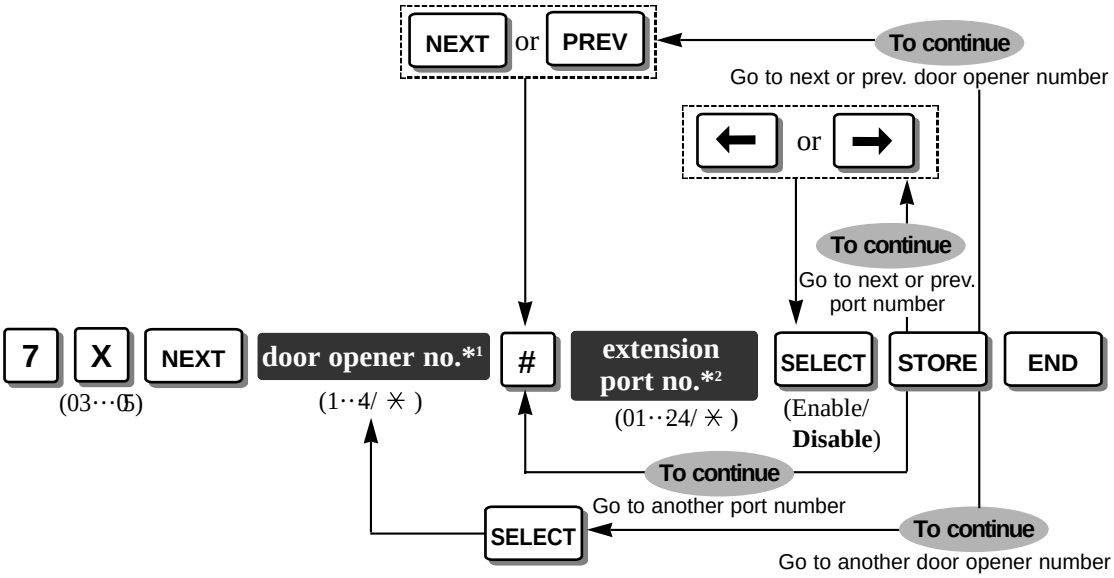
- **Feature Reference**

  Section 3, Features

  Doorphone Call

[703]-[705] *Door Opener Assignment—Day/Night/Lunch*

Enables or disables accessing to up to 4 door openers in the day, night and/or lunch modes for each extension.



X – Program address selection number: 03 ([703] for day) / 04 ([704] for night) / 05 ([705] for lunch)

***1** Door opener number: 1 through 4 / ✳ (All door openers)

***2** Extension port number: 01 through 24 / ✳ (All extension ports)

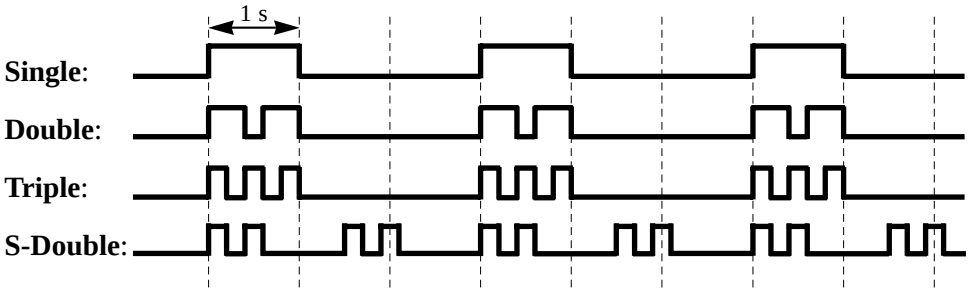
Default All door openers – all extension ports – Disable

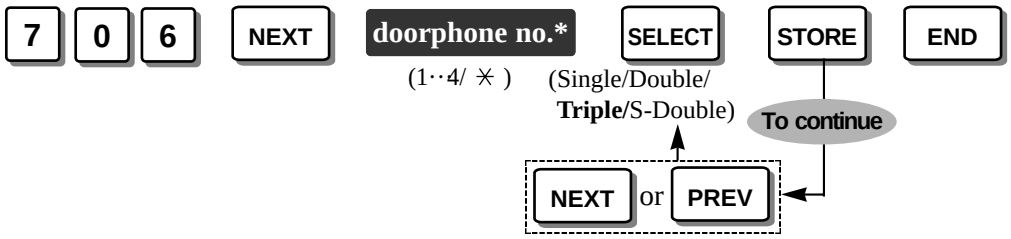
- **Feature Reference**

  Section 3, Features
  Door Opener

[706] *Doorphone Ringing / Tone Pattern Selection*

Selects the doorphone ringing pattern, **Single**, **Double**, **Triple** or **S-Double**.





***** Doorphone number: 1 through 4 / ✳ (All doorphones)

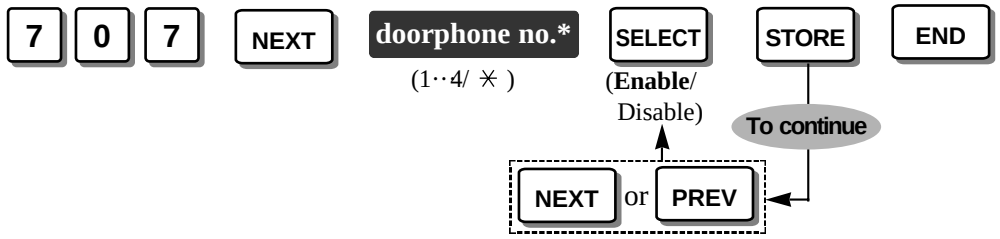
Default All doorphones – Triple

- When a doorphone call is received at a proprietary telephone, a tone is heard instead of ringing.

- **Feature References**
  Section 3, Features
  Doorphone Call, Ringing Pattern Selection

[707] *Doorphone Access Tone Selection*

Enables or disables sending a doorphone access tone to a monitored doorphone. If enabled, the access tone is heard from the doorphone when monitoring from a telephone starts.



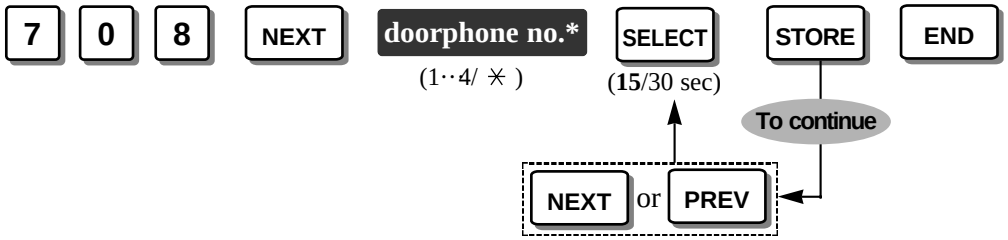
***** Doorphone number: 1 through 4 / ✳ (All doorphones)

Default All doorphones – Enable

- **Feature References**
  Section 3, Features
  Doorphone Call, Room Monitor

[708] *Doorphone Ringing Time*

Sets the ringing time when making an intercom call from a doorphone.



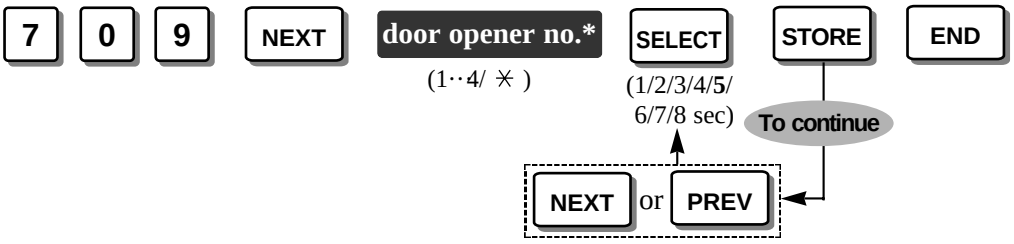
***** Doorphone number: 1 through 4 / ✳ (All doorphones)

Default All doorphones – 15 seconds

- **Feature Reference**
  Section 3, Features
  Doorphone Call

[709] *Door Opener Time*

Assigns the length of the door opener time. The door is unlocked for the assigned period of time.



***** Door opener number: 1 through 4 / ✳ (All door openers)

Default All door openers – 5 seconds

- **Feature Reference**
  Section 3, Features
  Door Opener

[800] *SMDR RS-232C Communication Parameters*

Assigns the communication parameters for the Serial Interface (RS-232C).

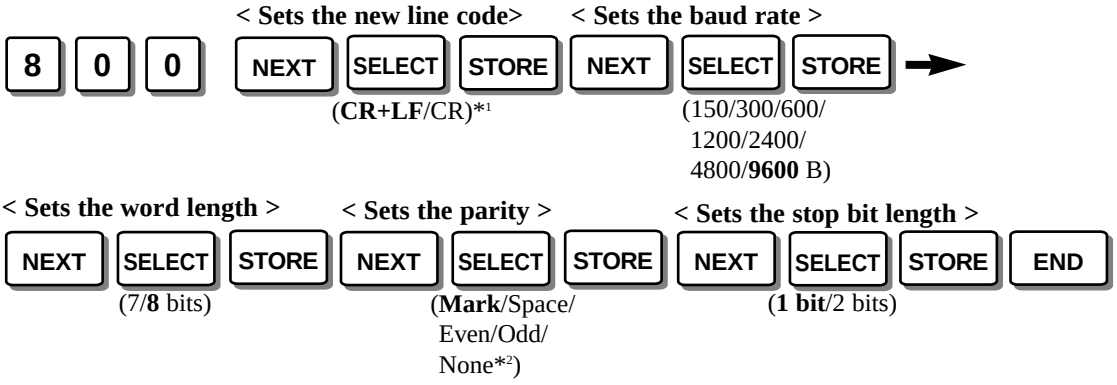
NL–Code: (New line) Selects the code for your printer or personal computer. If your printer or personal computer automatically feeds lines with a carriage return, select "CR". If not, select "CR+LF".

Baud Rate: The baud rate code indicates the data transmission speed from the system to the printer or personal computer.

Word Length: The word length code indicates how many bits compose a character.

Parity: The parity code indicates what type of parity is used to detect an error in the string of bits composing a character. Make your selection depending on the requirements of your printer or personal computer.

Stop Bit: The stop bit code indicates the end of a bit string which composes a character. Select a value depending on the requirements of your printer or personal computer.



*1 CR+LF (Carriage Return + Line Feed) / CR (Carriage Return)

*2 Select "None" when the error checking function is not required from the printer.

Default	New line	Baud rate	Word length	Parity	Stop bit length
	CR + LF	9600 baud	8 bits	Mark	1 bit

- To return to the previous mode, press PREV instead of NEXT.
- The following combinations are invalid.

Parity	Word length	Stop bit length
Mark	8	2
Space	8	1
Space	8	2

If any of the above invalid combinations are selected, an alarm tone is heard.

- **Feature Reference**

Section 3, Features
Station Message Detail Recording (SMDR)

[801] *SMDR Parameter*

Assigns the following 2 printing parameters to match the SMDR output with the paper size used in the printer.

Page Length: Sets the number of lines per page.
Skip Perf: (Perforation) Sets the number of lines to be skipped at the end of every page.

< Sets the page length >

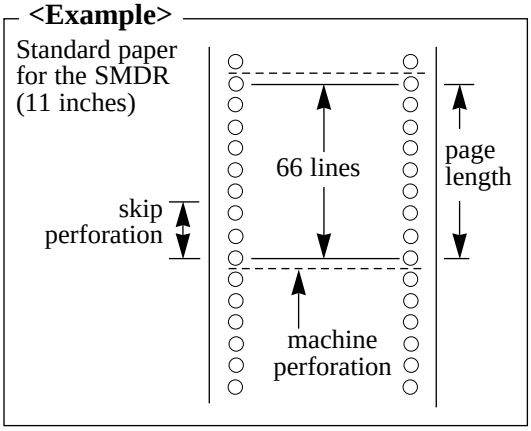
8 0 1 NEXT **page length** (4··99) STORE →

< Sets the skip perforation >

NEXT **skip perforation** (0··95) STORE END

Default Page length – 66 lines
Skip perforation – 0 line

<Example>



- The page length should be at least 4 lines longer than the skip perforation length.
- To correct a wrong entry, press the CLEAR button and enter the new one.

- **Feature Reference**

  Section 3, Features
  Station Message Detail Recording (SMDR)

[802] *Incoming/Outgoing Call Selection for Printing*

Determines which calls will produce an SMDR printout.

< Sets an outgoing call > **< Sets an incoming call >**

8 0 2 NEXT SELECT STORE NEXT SELECT STORE END

(**On**/Off/Toll)*1 (**On**/Off)*2

*1 Outgoing: On (Print all calls) / Off (No printing) / Toll (Print toll calls only)
*2 Incoming: On (Print all calls) / Off (No printing)

Default Outgoing calls / Incoming calls – On

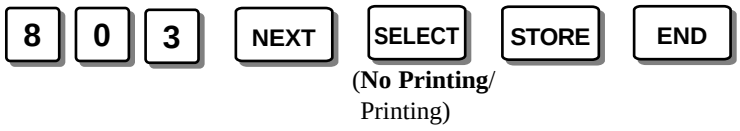
- If "Outgoing; Toll" is selected, only calls which are checked in programs [302]–[305] "Call Barring – Classes 2 through 5 Denied Codes" and are allowed, are printed out.

- **Feature Reference**

  Section 3, Features
  Station Message Detail Recording (SMDR)

[803] *Secret Speed Dialling / One-Touch Dialling Printing*

Selects to print or not print (on SMDR) secret dialling numbers stored in program [001] "System Speed Dialling Entry" and/or stored in One-Touch Dialling even though they are not displayed on the LCD.



Default No printing

- **Feature References**

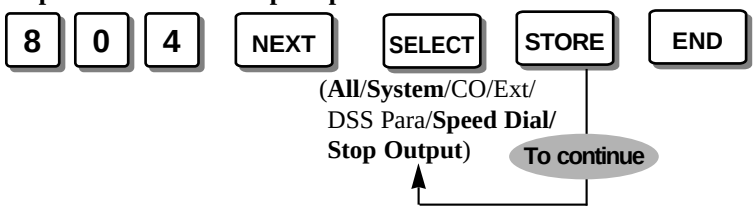
  Section 3, Features
  Secret Dialling, Station Message Detail Recording (SMDR)

[804] *System Data Dump*

Starts and stops printing the assigned data. All or a specific area of current system-programmed data is printed out. The areas are as follows.

All Para: Prints out all data.
System Para: Prints out all data except for the following 4 parameters.
CO Para: Prints out programs [400] through [403] and [405] through [424].
Ext Para: If the extension is a proprietary telephone, programs [102], [516] [600] through [613] and [615] will be printed out. The assigned data on the PF (Programmable Feature) buttons and line keys will also be printed out. If the extension is a single line telephone, programs [102], [516] and [600] through [614] will be printed out. The assigned Personal Speed Dialling numbers are also printed out.
DSS Para: Prints out the assigned data in the DSS buttons and PF buttons on the DSS console.
Speed Dial: Prints out the System Speed Dialling numbers and names assigned in programs [001] and [011].
Stop Output : Stops printing.

< To select All parameters, System parameter, Speed dial and/or Stop output. >



< To select the CO (exchange line) parameter. >

< To select the Extension parameter. >

< To select the DSS parameter. >

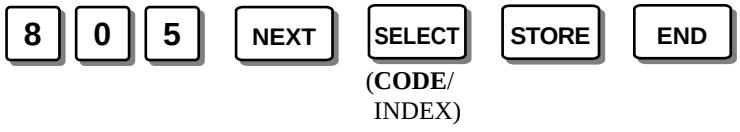
*****[1] Exchange line number: 1 through 6 / ✳ (All exchange lines)
*****[2] Extension port number: 01 through 24 / ✳ (All extension ports)
*****[3] DSS console number: 1 through 2 / ✳ (Both DSS console numbers)

- This program and [999] "System Data Clear" are not included.

- **Feature Reference**
  Section 3, Features
  Station Message Detail Recording (SMDR)

[805] *SMDR Account Code Selection*

Selects printing out the account code stored in program [310] "Account Codes", or just the index of the account code on SMDR printout.



Default CODE

- The printing of the index of the account code only occurs if the extension user entered their account code in the "Verify-All" or "Verify-Toll (Call Barring)" input mode as programmed in [605] "Account Code Entry Mode".

- **Feature References**
  Section 3, Features
  Account Code Entry, Station Message Detail Recording (SMDR)

[806] *SMDR Language Assignment*

Selects the language, **English**, **Spanish** or **Portuguese**, used for an SMDR printout.

8 0 6 NEXT SELECT STORE END

(**English**/Spanish
Portuguese)

Default English

- **Feature References**

  Section 3, Features
  Language Selection, Station Message Detail Recording (SMDR)

[998] *ROM Version*

Confirms the system ROM version.

9 9 8 NEXT END

Display example:

Y551JA 990620 (E)

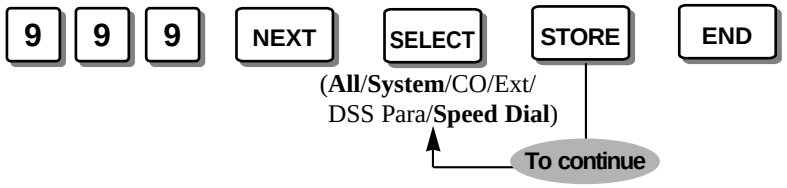
Version Date

[999] *System Data Clear*

Resets all or a specific area of the current assigned data to the default settings. The areas are as follows.

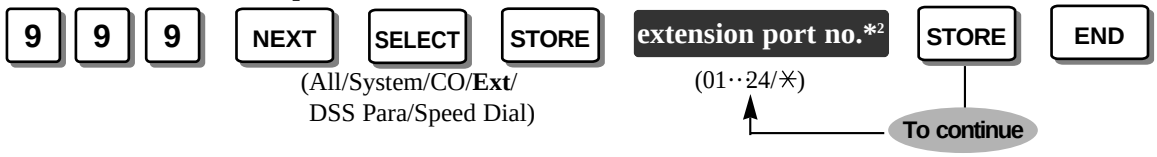
All Para : Resets all data to the default settings.
System Para: Resets all data to the default settings except for the data of the following 4 parameters.
CO Para: Resets programs [400] through [403] and [405] through [424] to the default settings on an exchange line basis.
Ext Para: Resets programs [102], [516] and [600] through [615] to the default settings on an extension basis.
DSS Para: Resets the assigned data on the DSS buttons and PF buttons on the DSS console.
Speed Dial : Resets the System Speed Dialling numbers (00 through 99) assigned in program [001].

< To select All, System parameter and/or Speed Dial. >



< To select the CO (exchange line) parameter. >

< To select the Extension parameter. >



< To select the DSS parameter. >

*1 Exchange line number: 1 through 6 / ✳ (All exchange lines)
*2 Extension port number: 01 through 24 / ✳ (All extension ports)
*3 DSS console number: 1 through 2 / ✳ (Both DSS console numbers)

- This program and [804] "System Data Dump" are not included.
- **Feature Reference**

  Section 3, Features
  System Data Default Set

Section 5
Appendix

5.1 Default Values

Address	Program	Default
[000]	Date and Time Setting	’98 Jan. 1 Thu 12:00 AM
[001]	System Speed Dialling Entry	All speed dialling numbers – Not stored
[002]	System Password	1234
[003]	DSS Console Port Assignment	All DSS Consoles — Disable
[004]	Paired Telephone Assignment for DSS Console	DSS1 – Disable, DSS2 – Disable
[005]	One-Touch Transfer Using a DSS Button	With Transfer
[006]	Time (Day/Night/Lunch) Service Changing Mode	Manual
[007]	Time (Day/Night/Lunch) Service Start Time	Every day of the week — Day – 9:00 AM / Night – 5:30 PM / Lunch-S – None / Lunch-E – None
[008]	Operator Assignment	Jack-01
[009]	Extension Number Assignment	Port 01 through 24 = Extn. 201 through 224
[010]	LCD Time Display Selection	12 HOUR
[011]	System Speed Dialling Name Setting	All System Speed Dialling numbers – Not stored
[012]	Alternative Feature Numbering Plan	All codes — Not stored
[100]	Hunting Group Set	All extension groups — Disable
[101]	Hunting Type	All extension groups – Terminate
[102]	Voice Mail Port for KX-TVP100	All 4 extension ports — Disable
[103]	DTMF Integration for KX-TVP100	Disable
[104]	Hold Mode Selection	Hold-1
[105]	Conference Tone	Enable
[106]	External Paging Access Tone	Enable
[107]	DTMF Receiver Check	All DTMF receivers — Enable
[108]	Recall Mode for a Locked Extension	Disable
[109]	CO Indicator Assignment	Enable
[110]	Recall Key Mode	MODE 1
[111]	Hold Music Selection	External
[112]	DSS Console Indication Mode	Enable
[115]	Extension Ringing Pattern Selection	Single
[116]	Conference Pattern Selection	5-party C-2 E-5
[117]	Call Pickup Tone	Enable

5.1 Default Values

Address	Program	Default
[118]	Pulse Restriction	Enable
[119]	Redialling after Pulse to Tone Conversion	Disable
[120]	Bell Frequency	25 Hz
[121]	Automatic Exchange Line Access Number Selection	Dial 9
[122]	Automatic Rotation for Exchange Line Access	Disable
[123]	Break Ratio	MODE 1
[124]	SLT Ringing Mode Selection	MODE 2
[125]	Call Barring Check for ✳ and #	Enable
[126]	DSS Off-Hook Mode	Enable
[127]	Pickup Group Set	All extension groups – Disable
[200]	Hold Recall Time	30 seconds
[201]	Transfer Recall Time	30 seconds
[202]	Call Forwarding Start Time	15 seconds delay
[203]	Pickup Dial Delay Time	3 seconds
[204]	Call Duration Count Start Time	10 seconds after dialling
[206]	Dialling Start Time	0 millisecond
[207]	Recall Timing Range Selection	MODE 1
[208]	Interdigit Time	20 seconds
[210]	DTMF Time	MODE 1
[211]	No Dial Disconnection	Enable
[212]	Exchange Line Duration Time Limit	10 minutes
[213]	Bell Off Detection	3 seconds
[300]	Carrier Excepted Code Assignment	All codes – Not stored
[301]	Call Barring — System Speed Dialling Boundary Class	Boundary Class-1
[302]–[305]	Call Barring — Classes 2 through 5 Denied Codes	All codes – Not stored
[306]	Call Barring — Exception Codes	All codes – Not stored
[309]	Emergency Dial Number Set	Code-01 = 999, Code-02 = 112, Other codes = Not stored
[310]	Account Codes	All codes – Not stored
[311]	Automatic Pause Insertion Codes	All codes – Not stored

5.1 Default Values

Address	Program	Default
[312]	Call Barring — Extension Lock Boundary Class	Disable
[350]	ARS Selection	All exchange lines – Disable
[351]-[354]	Routes 1 through 4 Selection Codes (Leading Digits)	All codes – Not stored
[355]-[358]	Routes 1 through 4 Exception Codes	All codes – Not stored
[359]	1st Carrier Selection Code (BT Line Access Code)	121 (British Telecom Line access code)
[360]	ARS Modification — Removed Digits	All routes – 0 (No deletion)
[361]	ARS Modification — Added Number	Route 1 = 131, Other routes = Not stored
[362]	ARS Dial Tone Pattern Selection	Tone 1
[363]	ARS Interdigit Time	5 seconds
[364]	ARS Trunk Grorup	All routes – ✳ (All trunk (TRK) groups)
[381]-[384]	Routes 1 through 4 Authorisation Codes	All exchange lines – Not stored
[385]-[388]	Routes 1 through 4 Itemised Bill	All exchange lines – Disable
[389]	Itemised Bill Code Assignment	Extension ports 01 through 24 – 201 through 224
[400]	Exchange Line Connection Assignment	All exchange lines – Connect
[401]	Dial Mode	All exchange lines – DTMF Mode
[402]	Pulse Speed Selection	All exchange lines – Low Speed
[403]	Host PBX Access Codes	All exchange lines – Not stored
[404]	Trunk Group Assignment	CO1 — TRK GRP-1; CO2 — TRK GRP-2; CO3 — TRK GRP-3; CO4 — TRK GRP-4; CO5 — TRK GRP-5; CO6 — TRK GRP-6;
[405]–[407]	Flexible Outward Dialling Assignment — Day/Night/Lunch	All exchange lines – all extension ports – Enable — Day/Night/Lunch
[408]–[410]	Flexible Ringing Assignment — Day/Night/Lunch	All exchange lines – all extension ports – Enable — Day/Night/Lunch
[411]–[413]	Delayed Ringing Assignment — Day/Night/Lunch	All exchange lines – all extension ports – Immdtly — Day/Night/Lunch
[414]–[416]	Exchange Line Mode — Day/Night/Lunch	All exchange lines — Normal — Day/Night/Lunch
[417]	Pause Time	All exchange lines — 1.5 seconds
[418]	Recall Time	All exchange lines – 100 milliseconds
[419]	Automatic Designated Exchange Line Access	All exchange lines — Enable

5.1 Default Values

Address	Program	Default
[420]	Calling Party Control (CPC) Signal	All exchange lines – 00 (Disable)
[421]	CPC Detection for Outgoing Calls	All exchange lines – Disable
[422]	Disconnect Time	All exchange lines – 2.0 seconds
[423]	Exchange Line Ringing Pattern Selection	All exchange lines – Double
[424]	Reverse (Polarity) Circuit Assignment	All exchange lines – Disable
[500]	DISA Incoming Dialling Mode Selection	Without AA
[501]	DISA Built-in Auto Attendant	All numbers — Not Stored
[502]	OGM Mode Selection	MODE 1
[503]	FAX Connection	Disable
[504]	DISA Delayed Answer Time	3 seconds
[505]	DISA Waiting Time after OGM	5 seconds
[506]	DISA Busy Mode	Disconnect
[507]	DISA Intercept Mode	Intercept
[508]	DISA Ringing Time before Intercept	20 seconds
[509]	DISA Ringing Time after Intercept	20 seconds
[510]	DISA No Dial Mode	DISA1 and DISA2 — Intercept
[513]	Cyclic Tone Detection	4 Times
[514]	Fax Tone Detection	1 Time
[515]	Intercept Time for Internal DISA	3 seconds
[516]	DISA Incoming Assignment	All extension ports — Enable
[517]	DISA AA Wait Time	2 seconds
[519]	DISA OGM Mute Time	0 second
[520]	UCD Group	Group – 1
[521]	UCD Busy Waiting Time	10 minutes
[522]	UCD OGM Message Interval Time	1 minute
[523]	UCD Busy Mode	Intercept
[524]	UCD Intercept Mode	Intercept
[525]	UCD Ringing Time before Intercept	20 seconds
[526]	UCD Ringing Time after Intercept	20 seconds
[600]	Extension Group Assignment	All extension ports — EXT GRP-1
[601]–[603]	Call Barring – Class of Service Assignment — Day/Night/Lunch	All extension ports — COS-1 — Day/Night/Lunch

5.1 Default Values

Address	Program	Default
[604]	Extension Name Setting	All extension ports – Not stored
[605]	Account Code Entry Mode	All extension ports – Option
[606]	Call Transfer to an Exchange Line	All extension ports – Disable
[607]	Call Forwarding to an Exchange Line	All extension ports – Disable
[608]	Executive Busy Override	All extension ports – Disable
[609]	Do Not Disturb Override	All extension ports – Disable
[610]	Parallelled Telephone Connection	All extension ports – Disable
[611]	TAM (Telephone Answering Machine) Extension	All extension ports – Disable
[612]	Room Monitor Assignment	All extension ports – Disable
[613]	Exchange Line Duration Time Limit Selection	All extension ports – Disable
[614]	Internal Pulse Detection	All extension ports – Enable
[615]	LCD Language Assignment	All extension ports – English
[700]–[702]	Doorphone Ringing Assignment — Day/Night/Lunch	All doorphones — all extension ports – Enable — Day/Night/Lunch
[703]–[705]	Door Opener Assignment — Day/Night/Lunch	All door openers – all extension ports – Disable — Day/Night/Lunch
[706]	Doorphone Ringing/Tone Pattern Selection	All doorphones — Triple
[707]	Doorphone Access Tone Selection	All doorphones — Enable
[708]	Doorphone Ringing Time	All doorphones — 15 seconds
[709]	Door Opener Time	All door openers — 5 seconds
[800]	SMDR RS-232C Communication Parameters	New line code = CR+LF; Baud rate = 9600; Word length = 8; Parity = Mark; Stop bit = 1
[801]	SMDR Parameter	Page length – 66; Skip perforation – 0
[802]	Incoming/Outgoing Call Selection for Printing	Outgoing calls – On; Incoming calls – On
[803]	Secret Speed Dialling/One Touch Dialling Printing	No printing
[805]	SMDR Account Code Selection	CODE
[806]	SMDR Language Assignment	English

5.2 Specifications

System Capacity	Exchange Lines: 3 max. (6 max. with 3-CO Line & 8 Ext Expansion Card) Extensions : 8 max. (24 max. with 3-CO Line & 8 Ext Expansion Card and 8 SLT Extension Expansion Card)
Control Method	CPU: 16 bit CPU Control ROM: 4 Mbit, Control RAM: 1 Mbit
Switching	Space Division CMOS Crosspoint Switch
Power Supplies	Primary: 230 V AC – 240 V AC, 50 Hz (0.5 A) Secondary: Circuit Volt (+5 V, +26 V)
Dialling	Dial Pulse (DP):10 pps, 20 pps Tone (DTMF) Dialling, DTMF–DP
Intercom Paths	4
Connector	Exchange Lines : 2-pin Modular Connector (RJ11) Extensions/Doorphone: 4-pin Modular Connector Pager/Music Source : EIAJ RC-6701 A plug (two-conductor, ø 3.5 mm in diameter)
Extension Connection Cable	KX-T7020 / KX-T7130 / KX-T7050 . . . . . .2 pair wire (A, B, H, L) Single Line Telephones . . . . . .1 pair wire (A, B)
SMDR (Station Message Detail Recording)	Interface : Serial Interface (RS-232C) (D-SUB, 9-pin) Output Equipment: Printer Detail Recording : Date, Time, Extension Number, Exchange Line Number, Dialled Number, Call Duration, Account Code
Extension Loop Limit	KX-T7020 / KX-T7130 / KX-T7050 . . . . . .40 Ω Single Line Telephones . . . . . .600 Ω including set Doorphones . . . . . .20 Ω
Minimum Leakage Resistance	15 000 Ω
Maximum Number of Extension Instruments per Line	**1** for a KX-T7020 / KX-T7130 / KX-T7050 or single line telephone **2** for by parallel connection of a proprietary telephone and a single line telephone
Ring Voltage	80 Vrms at 25 Hz depending on the Ringing Load
Local Exchange Loop Limit	1 600 Ω max.
Environmental Requirements	0 ˚C – 40 ˚C, 10 % – 90% relative humidity
Recall Timing Range	80 ms – 1 000 ms
Ability To Recognise Further Digits	The KX-TA624 is capable of accepting and acting upon routing information received from a proprietary telephone for 10 seconds, after the latest routing information has been received. (Satisfies BS6450:Part 1 1993 Clause 13.5.)

5.2 Specifications

Maximum associated cable loss for EXTN. port	PT: Max cable loss 0.34 dB (140 m max for ø 0.5 mm) SLT: Max cable loss 0.87 dB (698 m max for ø 0.5 mm)
Port to port loss	Loss across switch, PAS → 1AS Loss=1.13 dB (Not through–fed system)
Send and receive loudness ratings on port to port basis	Send loudness rating (1AS → PAS) : +3dB (0km) Receive loudness rating (PAS → 1AS) : -6 dB (0km)
Extension (1AS) port	3 ringers can be supported with extension wiring up to 698 m. **Notes** • Extension ports 01 through 24 may be used for off premise extensions in which case cabling would be required by BS 6701:Part 1 1986 to be equipped with over voltage protection. • When using separately approved extension telephones, the best overall performance of the PBX system will be obtained by using extension telephones of impedance class A clause 4.3.2.1. of BS 6305:1982.

Port Type Classification

Port Name	Brief Description	Port Type
Extn. Port**	Connect to PT, SLT	1 AS
PSTN Port**	Connect to Network	PAS
Paging Port (output)*	External Paging	4F
Ext. Music Port (input)*	External Music	4F
Doorphone Port*	Connect to KX-T30865	4E
Door Opener Port	Door Opener	4F
EIA (RS-232C) Port	Connect to PC, Printer	4E

* These ports do not respond to address signalling.
** These ports provide DTMF and Loop Disconnect Signalling.

Port Types between which Call Paths can be established

From \ To	Extn.	PSTN	Paging	Ext. Music	Door-Phone	Door Opener	EIA (RS-232C)
Extn.	A	A	A	X	A	X	X
PSTN	A	A	X	X	X	X	X
Paging	X	X	X	X	X	X	X
Ext. Music	A	A	A	N/A	X	X	X
Doorphone	A	X	X	X	N/A	X	X
Door Opener	X	X	X	X	X	N/A	X
EIA (RS-232C)	X	X	X	X	X	X	N/A

A: Allowed X: Not allowed N/A: Not applicable.

5.2 Specifications

Lines, Cards, Extension Equipment

Item	Max. Quantity
Service Units	1
Exchange lines	6
Extension ports	24
Extension Terminals	40
3-CO Line and 8 Ext Expansion Card	1
8 SLT Extension Expansion Card	1
OGM/FAX Detection Card	1
Doorphone/Door Opener Card	1
Doorphones	4
Door Openers	4
External Pager	1
External Music Source	1
DSS Consoles	2

System Data

Item	Max. Quantity
Operator	1
System Speed Dialling	100
One Touch Dialling	24 per extension (Proprietary telephone)
Personal Speed Dialling	10 per extension
Call Park areas	10
Absent Messages	6
Call Barring Classes	5
Extension Groups	8
Message Waitings	8 per extension

Section 6
Troubleshooting

6.1 While Installing

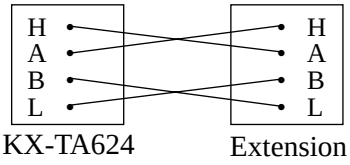
PROBLEM	PROBABLE CAUSE	POSSIBLE SOLUTION
Extension does not operate.	Something is wrong with the printed circuit board (Extension Card).	Exchange the printed circuit board with another printed circuit board.
	Something is wrong with the connection between the system and extension.	Take the extension and plug it into the same extension port using a short telephone cord. If the telephone works correctly, the connection between the system and the extension must be repaired.
	A telephone with an A-A1 relay is connected.	Use a 2 wire cord. Set the A-A1 relay switch on the telephone to the "OUT" or "OFF" position.
	Something is wrong with the extension.	Take the extension and plug it into another extension port that is working. If the telephone does not work, replace the phone.
Improper reset operation.		Turn the Power Switch "OFF" and then "ON".
Noise during external paging.	Induced noise on the wire between the system and the amplifier.	Use a shielded cable as the connection wire between the system and amplifier. A short shielded cable is recommended.
Volume distortion from external music source.	Excessive input level from external music source.	Decrease the output level of the external music source by using the volume control on the music source.
Speed Dialling or One-Touch Dialling does not function.	Wrong programming.	Enter an exchange line access number (9 or 0, 81 through 86) in programming.
A proprietary telephone connected to extension ports 01 through 08, 09 through 16, or 17 through 24 does not operate, but a single line telephone operates.	An extension (H, L) port 01 through 08, 09 through 16, or 17 through 24 may have been shorted.	Turn the Power Switch "OFF". Fix the shorted part, then turn the Power Switch "ON".

6.2 While Connecting

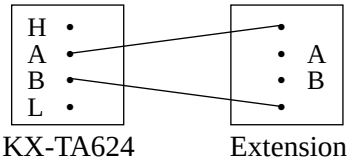
Can you dial an extension?

No

Connection between the system and a proprietary telephone:

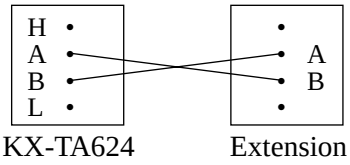
CAUSE	SOLUTION
A/B is connected to H/L.  	Use the correct cord (the inner 2 wires are for A/B and the outer 2 wires are for H/L).

Connection between the system and a single line telephone:

CAUSE	SOLUTION
A/B is connected to H/L.  	Use the correct cord (the inner 2 wires are for A/B).

Yes

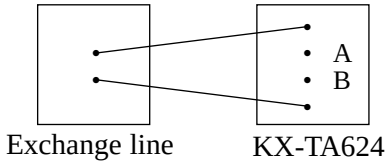
Connection between the system and a single line telephone that is polarity-sensitive:

CAUSE	SOLUTION
“A” is connected to “B”.  	Reverse the connections of A/B.

Can you dial out using an exchange line?

No

Connection between the Local Exchange and the system:

CAUSE	SOLUTION
Exchange lines are connected to H/L.  	Reconnect the exchange lines to A/B using 2-conductor wiring.

6.3 While Operating

PROBLEM	PROBABLE CAUSE	POSSIBLE SOLUTION
When using the speakerphone with a proprietary telephone, KX-T7130, nothing is heard.	The HANDSET/HEADSET selector on the KX-T7130 is set to the “HEADSET” position.	Set the HANDSET/HEADSET selector to the “HANDSET” position.
The unit does not ring.	The Ringer Volume Selector is set to “OFF”.	Set to “HIGH” or “LOW”.
During a power failure, the extension connected to port number 01 or 09 does not operate.	A proprietary telephone is connected to the port.	Disconnect the proprietary telephone and connect a single line telephone.
Making an outside call cannot be performed.	The corresponding line key does not exist on the proprietary telephone.	Program the line key. See the Flexible Button Assignment. (☞ Operating Instructions, 1.2 Proprietary Telephone Settings, “Customising the Buttons on Your Telephone”)
A tone type single line telephone (SLT) user cannot make a call.	There may be something wrong with a DTMF receiver.	1. Select “Enable” for DTMF receiver 1 and “Disable” for DTMF receiver 2 in program [107]. 2. Make a call using a tone type SLT connected to one of extension ports 01–08. 3. If you cannot make the call, the problem may have been caused by DTMF receiver 1. If the call can be made, go to step 4. 4. Try DTMF receiver 2. Select “Disable” for DTMF receiver 1 and “Enable” for DTMF receiver 2 in program [107], and make another call. If you cannot make the call, the problem may have been caused by DTMF receiver 2. If the call can be made, go to step 5. 5. Check the other 4 DTMF receivers in the same way. Refer to program [107].

Section 7

Programming Tables

[000] Date and Time Setting							
	Year (00 – 99)	Month (Jan. – Dec.)	Day (1 – 31)	Day of the week (Sun – Sat)	Hour (1 – 12)	Minute (00 – 59)	AM / PM
Default	’98	Jan.	1	Thu	12	00	AM
Change							

[002] System Password				
Default				Parameter: 4 digits, 0 – 9
1	2	3	4	

	[003] DSS Console Port Assignment	[004] Paired Telephone Assignment for DSS Console
Selection	DSS console port no. (02⋯16) / Disable	Paired telephone port no. (01⋯16) / Disable
Default	All: Disable	DSS 1 – Disable / DSS 2 – Disable
DSS 1		
DSS 2		

[005] One-Touch Transfer Using a DSS Button		
	Default	Selection
With Transfer	✓	
Without Transfer		

[006] Time (Day/Night/Lunch) Service Changing Mode		
	Default	Selection
Manually	✓	
Automatically		

[007] Time (Day/Night/Lunch) Service Start Time									
	Default	Change							
	Every day	Every day	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
Day	9:00 AM								
Night	5:30 PM								
Lunch-S	None								
Lunch-E	None								

[008] Operator Assignment		
	Default	Port no.
Operator	Jack-01	

[010] LCD Time Display Selection		
	Default	Selection
12 HOUR	✓	
24 HOUR		

SPD no.	[001] System Speed Dialling Entry	[011] System Speed Dialling Name Setting
	Telephone number (32 digits max.)	Name (16 characters max.)
Default	All: Not stored	
00		
01		
02		
03		
04		
05		
06		
07		
08		
09		
10		
11		
12		
13		
14		
15		
16		
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(Continued)

SPD no.	[001] System Speed Dialling Entry	[011] System Speed Dialling Name Setting
	Telephone number (32 digits max.)	Name (16 characters max.)
Default	All: Not stored	
40		
41		
42		
43		
44		
45		
46		
47		
48		
49		
50		
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
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72		
73		
74		
75		
76		
77		
78		
79		

(Continued)

SPD no.	[001] System Speed Dialling Entry	[011] System Speed Dialling Name Setting
	Telephone number (32 digits max.)	Name (16 characters max.)
Default	All: Not stored	
80		
81		
82		
83		
84		
85		
86		
87		
88		
89		
90		
91		
92		
93		
94		
95		
96		
97		
98		
99		

[009] Extension Number Assignment						
Selection	Plan 1		Plan 2		Plan 3	
Default	✓					
Change						
Extension jack no.	Extension no. (200···299)		Extension no. (100···499)		Extension no. (10···49)	
	Default	Change	Default	Change	Default	Change
01	201		201		21	
02	202		202		22	
03	203		203		23	
04	204		204		24	
05	205		205		25	
06	206		206		26	
07	207		207		27	
08	208		208		28	
09	209		209		29	
10	210		210		30	
11	211		211		31	
12	212		212		32	
13	213		213		33	
14	214		214		34	
15	215		215		35	
16	216		216		36	
17	217		217		37	
18	218		218		38	
19	219		219		39	
20	220		220		40	
21	221		221		41	
22	222		222		42	
23	223		223		43	
24	224		224		44	

[012] Alternative Feature Numbering Plan			
CODE no.	Feature no. (10 digits max.)	CODE no.	Feature no. (10 digits max.)
Default: All	Not stored		
50		55	
51		56	
52		57	
53		58	
54		59	

[100] Hunting Group Set										
Selection	Default	Extension group no. (1⋯8, ✳ : all)								
	All	1	2	3	4	5	6	7	8	✳
Disable	✓									
Enable										

[101] Hunting Type										
Selection	Default	Extension group no. (1⋯8, ✳ : all)								
	All	1	2	3	4	5	6	7	8	✳
Terminate	✓									
Circular										

	[102] Voice Mail Port for KX-TVP100						[107] DTMF Receiver Check						
Selection	Default	Extn. port no. (07, 08, 15, 16, ✳ : all)					Default	DTMF receiver no. (1⋯6)					
	All	07	08	15	16	✳	All	1	2	3	4	5	6
Disable	✓												
Enable							✓						

	[103] DTMF Integration for KX-TVP100		[104] Hold Mode Selection			[105] Conference Tone		[106] External Paging Access Tone	
Selection	Enable	Disable	Hold-1	Hold-2	Hold-3	Enable	Disable	Enable	Disable
Default		✓	✓			✓		✓	
Change									

	[108] Recall Mode for a Locked Extension		[109] CO Indicator Assignment		[110] Recall Key Mode	
Selection	Enable	Disable	Enable	Disable	MODE 1	MODE 2
Default		✓	✓		✓	
Change						

	[111] Hold Music Selection		[112] DSS Console Indication Mode	
Selection	External	Tone	Enable	Disable
Default	✓		✓	
Change				

	[115] Extension Ringing Pattern Selection			[116] Conference Pattern Selection			
Selection	Single	Double	Triple	3-Party C-0 E-3	3-Party C-1 E-3	3-Party C-2 E-3	5-Party C-2 E-5
Default	✓						✓
Change							

	[117] Call Pickup Tone		[118] Pulse Restriction		[119] Redialling after Pulse to Tone Conversion		[120] Bell Frequency	
Selection	Enable	Disable	Enable	Disable	Enable	Disable	20 Hz	25 Hz
Default	✓		✓			✓		✓
Change								

	[121] Automatic Exchange Line Access Number Selection		[122] Automatic Rotation for Exchange Line Access	
Selection	Dial 0	Dial 9	Enable	Disable
Default		✓		✓
Change				

	[123] Break Ratio		[124] SLT Ringing Mode Selection		[125] Call Barring Check for ✳ and #		[126] DSS Off-Hook Mode	
Selection	MODE 1	MODE 2	MODE 1	MODE 2	Enable	Disable	Enable	Disable
Default	✓			✓	✓		✓	
Change								

[127] Pickup Group Set										
Selection	Default	Extension group no. (1⋯8, ✳ : all)								
	All	1	2	3	4	5	6	7	8	✳
Disable	✓									
Enable										

[200] Hold Recall Time									
Selection	30 sec	1 min	1.5 min	2 min	3 min	4 min	5 min	6 min	Disable
Default	✓								
Change									

	[201] Transfer Recall Time				[202] Call Forwarding Start Time				[203] Pickup Dial Delay Time			
Selection	15 sec	30 sec	1 min	2 min	5 sec	10 sec	15 sec	20 sec	1 sec	2 sec	3 sec	4 sec
Default		✓					✓				✓	
Change												

[204] Call Duration Count Start Time											
Selection	5 sec	10 sec	15 sec	20 sec	25 sec	30 sec	35 sec	40 sec	45 sec	50 sec	Instantly
Default		✓									
Change											

	[206] Dialling Start Time						
Selection	0 ms	250 ms	500 ms	750 ms	1000 ms	1250 ms	1500 ms
Default	✓						
Change							

	[207] Recall Timing Range Selection					[208] Interdigit Time			
Selection	MODE 1	MODE 2	MODE 3	MODE 4	MODE 5	5 sec	10 sec	15 sec	20 sec
Default	✓								✓
Change									

	[210] DTMF Time		[211] No Dial Disconnection		[212] Exchange Line Duration Time Limit	[213] Bell Off Detection		
Selection	MODE 1	MODE 2	Enable	Disable	1···32 minutes	3 sec	6 sec	12 sec
Default	✓		✓		10 minutes	✓		
Change								

[300] Carrier Excepted Code Assignment			
CODE no.	Carrier code (10 digits max.)	CODE no.	Carrier code (10 digits max.)
Default: All	Not stored		
01		11	
02		12	
03		13	
04		14	
05		15	
06		16	
07		17	
08		18	
09		19	
10		20	

[301] Call Barring — System Speed Dialling Boundary Class					
Selection	Class-1	Class-2	Class-3	Class-4	Class-5
Default	✓				
Change					

	[302] Call Barring – Class 2 Denied Codes	[303] Call Barring – Class 3 Denied Codes	[304] Call Barring – Class 4 Denied Codes	[305] Call Barring – Class 5 Denied Codes
CODE no.	Telephone no. (11 digits)			
Default	All: Not stored			
01				
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

[306] Call Barring – Exception Codes			
Code no.	Telephone no. (11 digits)	Code no.	Telephone no. (11 digits)
Default	All: Not stored		
01		41	
02		42	
03		43	
04		44	
05		45	
06		46	
07		47	
08		48	
09		49	
10		50	
11		51	
12		52	
13		53	
14		54	
15		55	
16		56	
17		57	
18		58	
19		59	
20		60	
21		61	
22		62	
23		63	
24		64	
25		65	
26		66	
27		67	
28		68	
29		69	
30		70	
31		71	
32		72	
33		73	
34		74	
35		75	
36		76	
37		77	
38		78	
39		79	
40		80	

[309] Emergency Dial Number Set	
CODE no.	Emergency no. (11 digits max.)
Default	Code-01 = 999, Code-02 = 112, Other codes = Not stored
1	
2	
3	
4	
5	

[310] Account Codes			
CODE no.	Account code (4 digits)	CODE no.	Account code (4 digits)
Default	All: Not stored		
01		13	
02		14	
03		15	
04		16	
05		17	
06		18	
07		19	
08		20	
09		21	
10		22	
11		23	
12		24	

[311] Automatic Pause Insertion Codes			
CODE no.	Pause code (7 digits max.)	CODE no.	Pause code (7 digits max.)
Default	All: Not stored		
01		21	
02		22	
03		23	
04		24	
05		25	
06		26	
07		27	
08		28	
09		29	
10		30	
11		31	
12		32	
13		33	
14		34	
15		35	
16		36	
17		37	
18		38	
19		39	
20		40	

[312] Call Barring – Extension Lock Boundary Class		
	Default	Change
Disable	✓	
COS-2		
COS-3		
COS-4		
COS-5		

[350] ARS Selection								
Selection	Default	Exchange line no. (1⋯6,✳ : All)						
	All	1	2	3	4	5	6	✳
Enable								
Disable	✓							

[351] Route 1 Selection Codes (Leading Digits)			
Code no.	Area code no. (7 digits max.)	Code no.	Area code no. (7 digits max.)
Default	All: Not stored		
01		41	
02		42	
03		43	
04		44	
05		45	
06		46	
07		47	
08		48	
09		49	
10		50	
11		51	
12		52	
13		53	
14		54	
15		55	
16		56	
17		57	
18		58	
19		59	
20		60	
21		61	
22		62	
23		63	
24		64	
25		65	
26		66	
27		67	
28		68	
29		69	
30		70	
31		71	
32		72	
33		73	
34		74	
35		75	
36		76	
37		77	
38		78	
39		79	
40		80	

[352] Route 2 Selection Codes (Leading Digits)			
Code no.	Area code no. (7 digits max.)	Code no.	Area code no. (7 digits max.)
Default	All: Not stored		
01		41	
02		42	
03		43	
04		44	
05		45	
06		46	
07		47	
08		48	
09		49	
10		50	
11		51	
12		52	
13		53	
14		54	
15		55	
16		56	
17		57	
18		58	
19		59	
20		60	
21		61	
22		62	
23		63	
24		64	
25		65	
26		66	
27		67	
28		68	
29		69	
30		70	
31		71	
32		72	
33		73	
34		74	
35		75	
36		76	
37		77	
38		78	
39		79	
40		80	

[353] Route 3 Selection Codes (Leading Digits)			
Code no.	Area code no. (7 digits max.)	Code no.	Area code no. (7 digits max.)
Default	All: Not stored		
01		41	
02		42	
03		43	
04		44	
05		45	
06		46	
07		47	
08		48	
09		49	
10		50	
11		51	
12		52	
13		53	
14		54	
15		55	
16		56	
17		57	
18		58	
19		59	
20		60	
21		61	
22		62	
23		63	
24		64	
25		65	
26		66	
27		67	
28		68	
29		69	
30		70	
31		71	
32		72	
33		73	
34		74	
35		75	
36		76	
37		77	
38		78	
39		79	
40		80	

[354] Route 4 Selection Codes (Leading Digits)			
Code no.	Area code no. (7 digits max.)	Code no.	Area code no. (7 digits max.)
Default	All: Not stored		
01		41	
02		42	
03		43	
04		44	
05		45	
06		46	
07		47	
08		48	
09		49	
10		50	
11		51	
12		52	
13		53	
14		54	
15		55	
16		56	
17		57	
18		58	
19		59	
20		60	
21		61	
22		62	
23		63	
24		64	
25		65	
26		66	
27		67	
28		68	
29		69	
30		70	
31		71	
32		72	
33		73	
34		74	
35		75	
36		76	
37		77	
38		78	
39		79	
40		80	

[355] Route 1 Exception Codes			
Code no.	Area code no. (7 digits max.)	Code no.	Area code no. (7 digits max.)
Default	All: Not stored		
01		41	
02		42	
03		43	
04		44	
05		45	
06		46	
07		47	
08		48	
09		49	
10		50	
11		51	
12		52	
13		53	
14		54	
15		55	
16		56	
17		57	
18		58	
19		59	
20		60	
21		61	
22		62	
23		63	
24		64	
25		65	
26		66	
27		67	
28		68	
29		69	
30		70	
31		71	
32		72	
33		73	
34		74	
35		75	
36		76	
37		77	
38		78	
39		79	
40		80	

[356] Route 2 Exception Codes			
Code no.	Area code no. (7 digits max.)	Code no.	Area code no. (7 digits max.)
Default	All: Not stored		
01		41	
02		42	
03		43	
04		44	
05		45	
06		46	
07		47	
08		48	
09		49	
10		50	
11		51	
12		52	
13		53	
14		54	
15		55	
16		56	
17		57	
18		58	
19		59	
20		60	
21		61	
22		62	
23		63	
24		64	
25		65	
26		66	
27		67	
28		68	
29		69	
30		70	
31		71	
32		72	
33		73	
34		74	
35		75	
36		76	
37		77	
38		78	
39		79	
40		80	

[357] Route 3 Exception Codes			
Code no.	Area code no. (7 digits max.)	Code no.	Area code no. (7 digits max.)
Default	All: Not stored		
01		41	
02		42	
03		43	
04		44	
05		45	
06		46	
07		47	
08		48	
09		49	
10		50	
11		51	
12		52	
13		53	
14		54	
15		55	
16		56	
17		57	
18		58	
19		59	
20		60	
21		61	
22		62	
23		63	
24		64	
25		65	
26		66	
27		67	
28		68	
29		69	
30		70	
31		71	
32		72	
33		73	
34		74	
35		75	
36		76	
37		77	
38		78	
39		79	
40		80	

[358] Route 4 Exception Codes			
Code no.	Area code no. (7 digits max.)	Code no.	Area code no. (7 digits max.)
Default	All: Not stored		
01		41	
02		42	
03		43	
04		44	
05		45	
06		46	
07		47	
08		48	
09		49	
10		50	
11		51	
12		52	
13		53	
14		54	
15		55	
16		56	
17		57	
18		58	
19		59	
20		60	
21		61	
22		62	
23		63	
24		64	
25		65	
26		66	
27		67	
28		68	
29		69	
30		70	
31		71	
32		72	
33		73	
34		74	
35		75	
36		76	
37		77	
38		78	
39		79	
40		80	

[359] 1st Carrier Selection Code (BT Line Access Code)	
Selection	1st carrier access code (4 digits max.)
Default	121 (British Telecom Line access code)
Change	

	[360] ARS Modification – Removed Digits	[361] ARS Modification – Added Number	[364] ARS Trunk Group						
Route no.	Deleted digits (0⋯9)	Added no. : 20 digits max. (0⋯9, ✳ , #)	Trunk (TRK) group no. (1⋯6, ✳)						
			1	2	3	4	5	6	✳
Default	All routes – 0	Route 1 = 131, Other routes = Not stored	All routes – ✳						
1									
2									
3									
4									

	[362] ARS Dial Tone Pattern Selection				[363] ARS Interdigit Time
Selection	Disable	Tone 1	Tone 2	Tone 3	1⋯20 seconds
Default		✓			5 seconds
Change					

	[381] Route 1 Authorisation Code	[382] Route 2 Authorisation Code	[383] Route 3 Authorisation Code	[384] Route 4 Authorisation Code
Exchange line no.	Authorisation code : 19 digits max. (0⋯9)			
Default	All: Not stored			
1				
2				
3				
4				
5				
6				
✳				

	[385] Route 1 Itemised Bill		[386] Route 2 Itemised Bill		[387] Route 3 Itemised Bill		[388] Route 4 Itemised Bill	
Exchange line no.	Selection		Selection		Selection		Selection	
	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable
Default: All		✓		✓		✓		✓
1								
2								
3								
4								
5								
6								
✳								

[389] Itemised Bill Code Assignment			
Extension port no.	Itemised bill code : 3 digits max. (0···9)	Extension port no.	Itemised bill code : 3 digits max. (0···9)
Default	Extension ports 01 through 24 = 201 through 224		
01		14	
02		15	
03		16	
04		17	
05		18	
06		19	
07		20	
08		21	
09		22	
10		23	
11		24	
12		✳	
13			

	[400] Exchange Line Connection Assignment		[401] Dial Mode			[402] Pulse Speed Selection	
Exchange line no.	Selection		Selection			Selection	
	Connect	No Connect	DTMF	Pulse	Call Blocking	Low Speed	High Speed
Default: All	✓		✓			✓	
1							
2							
3							
4							
5							
6							
✳							

	[403] Host PBX Access Codes	[404] Trunk Group Assignment	
Exchange line no.	Access codes (1 or 2 digits, 8 different codes max.)	Trunk group no. (1···6)	
Default	All: Not stored	Default	Change
1		1	
2		2	
3		3	
4		4	
5		5	
6		6	
✳		—	

[405] Flexible Outward Dialling Assignment — Day														
Extension port no.	Exchange line 1		Exchange line 2		Exchange line 3		Exchange line 4		Exchange line 5		Exchange line 6		✳ (All)	
	Selection													
	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable
Default: All	✓		✓		✓		✓		✓		✓		✓	
01														
02														
03														
04														
05														
06														
07														
08														
09														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														
✳														

[406] Flexible Outward Dialling Assignment — Night														
Extension port no.	Exchange line 1		Exchange line 2		Exchange line 3		Exchange line 4		Exchange line 5		Exchange line 6		✳ (All)	
	Selection													
	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable
Default: All	✓		✓		✓		✓		✓		✓		✓	
01														
02														
03														
04														
05														
06														
07														
08														
09														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														
✳														

[407] Flexible Outward Dialling Assignment — Lunch														
Extension port no.	Exchange line 1		Exchange line 2		Exchange line 3		Exchange line 4		Exchange line 5		Exchange line 6		✳ (All)	
	Selection													
	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable
Default: All	✓		✓		✓		✓		✓		✓		✓	
01														
02														
03														
04														
05														
06														
07														
08														
09														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														
✳														

[408] Flexible Ringing Assignment — Day														
Extension port no.	Exchange line 1		Exchange line 2		Exchange line 3		Exchange line 4		Exchange line 5		Exchange line 6		✳ (All)	
	Selection													
	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable
Default: All	✓		✓		✓		✓		✓		✓		✓	
01														
02														
03														
04														
05														
06														
07														
08														
09														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														
✳														

[409] Flexible Ringing Assignment — Night														
Extension port no.	Exchange line 1		Exchange line 2		Exchange line 3		Exchange line 4		Exchange line 5		Exchange line 6		✳ (All)	
	Selection													
	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable
Default: All	✓		✓		✓		✓		✓		✓		✓	
01														
02														
03														
04														
05														
06														
07														
08														
09														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														
✳														

[410] Flexible Ringing Assignment — Lunch														
Extension port no.	Exchange line 1		Exchange line 2		Exchange line 3		Exchange line 4		Exchange line 5		Exchange line 6		✳ (All)	
	Selection													
	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable
Default: All	✓		✓		✓		✓		✓		✓		✓	
01														
02														
03														
04														
05														
06														
07														
08														
09														
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18														
19														
20														
21														
22														
23														
24														
✳														

[411] Delayed Ringing Assignment — Day																												
Extension port no.	Exchange line 1				Exchange line 2				Exchange line 3				Exchange line 4				Exchange line 5				Exchange line 6				✳ (All)			
	Selection (I: Immediately, 10: 10 seconds delay, 20: 20 seconds delay, 30: 30 seconds delay)																											
	I	10	20	30	I	10	20	30	I	10	20	30	I	10	20	30	I	10	20	30	I	10	20	30	I	10	20	30
Default: All	✓				✓				✓				✓				✓				✓				✓			
01																												
02																												
03																												
04																												
05																												
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19																												
20																												
21																												
22																												
23																												
24																												
✳																												

[412] Delayed Ringing Assignment — Night																											
Extension port no.	Exchange line 1				Exchange line 2				Exchange line 3				Exchange line 4				Exchange line 5				Exchange line 6				✳ (All)			
	Selection (I: Immediately, 10: 10 seconds delay, 20: 20 seconds delay, 30: 30 seconds delay)																										
	I	10	20	30	I	10	20	30	I	10	20	30	I	10	20	30	I	10	20	30	I	10	20	30	I	10	20	30
Default: All	✓				✓				✓				✓				✓				✓				✓			
01																											
02																											
03																											
04																											
05																											
06																											
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20																											
21																											
22																											
23																											
24																											
✳																											

[413] Delayed Ringing Assignment — Lunch																												
Extension port no.	Exchange line 1				Exchange line 2				Exchange line 3				Exchange line 4				Exchange line 5				Exchange line 6				✳ (All)			
	Selection (I: Immediately, 10: 10 seconds delay, 20: 20 seconds delay, 30: 30 seconds delay)																											
	I	10	20	30	I	10	20	30	I	10	20	30	I	10	20	30	I	10	20	30	I	10	20	30	I	10	20	30
Default: All	✓				✓				✓				✓				✓				✓				✓			
01																												
02																												
03																												
04																												
05																												
06																												
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19																												
20																												
21																												
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23																												
24																												
✳																												

Exchange line no.	[414] Exchange Line Mode — Day						[415] Exchange Line Mode — Night						[416] Exchange Line Mode — Lunch					
	Selection — N: Normal, DIL + Extension port no. (01⋯24), D1: DISA1, D2: DISA2, U: UCD																	
	N	DIL	Extn. no.	D1	D2	U	N	DIL	Extn. no.	D1	D2	U	N	DIL	Extn. no.	D1	D2	U
Default: All	✓						✓						✓					
1																		
2																		
3																		
4																		
5																		
6																		
✳																		

Exchange line no.	[417] Pause Time				[418] Recall Time						
	Selection (seconds)				Selection (milliseconds)						
	1.5	2.5	3.5	4.5	80	100	160	300	600	900	1200
Default: All	✓					✓					
1											
2											
3											
4											
5											
6											
✳											

Exchange line no.	[419] Automatic Designated Exchange Line Access		[420] Calling Party Control (CPC) Signal	[421] CPC Detection for Outgoing Calls	
	Selection		Selection: 00 (Disable), 00 (22 msec)⋯75 (614 msec)	Selection	
	Enable	Disable		Enable	Disable
Default: All	✓		00 (Disable)		✓
1					
2					
3					
4					
5					
6					
✳					

	[422] Disconnect Time			[423] Exchange Line Ringing Pattern Selection			[424] Reverse (Polarity) Circuit Assignment	
Exchange line no.	Selection (seconds)			Selection			Selection	
	0.5	2.0	4.0	Single	Double	Triple	Enable	Disable
Default: All		✓			✓			✓
1								
2								
3								
4								
5								
6								
✳								

[500] DISA Incoming Dialling Mode Selection		
Selection	Without AA	With AA
Default	✓	
Change		

[501] DISA Built-in Auto Attendant		
Auto attendant no.	Selection	
	Jack: Extension port no. (01⋯24)	GRP: Extension group no. (1⋯8)
Default	All: Not stored	
0		
1		
2		
3		
4		
5		
6		
7		
8		
9		

	[502] OGM Mode Selection						[503] FAX Connection
Selection	MODE 1	MODE 2	MODE 3	MODE 4	MODE 5	MODE 6	Extension port no. (01⋯24) / Disable
Default	✓						Disable (Not assigned)
Change							

	[504] DISA Delayed Answer Time				[505] DISA Waiting Time after OGM			
Selection	0 sec	3 sec	6 sec	12 sec	0 sec	5 sec	10 sec	15 sec
Default		✓				✓		
Change								

	[506] DISA Busy Mode			[507] DISA Intercept Mode		[508] DISA Ringing Time before Intercept					
Selection	Disconnect	Call Waiting	DISA 2	Intercept	Disconnect	10 sec	20 sec	30 sec	40 sec	60 sec	120 sec
Default	✓			✓			✓				
Change											

	[509] DISA Ringing Time after Intercept						[510] DISA No Dial Mode			
Selection	10 sec	20 sec	30 sec	40 sec	60 sec	120 sec	DISA 1		DISA 2	
							Intercept	Disconnect	Intercept	Disconnect
Default		✓					✓		✓	
Change										

	[513] Cyclic Tone Detection			
Selection	Disable	2 Times	3 Times	4 Times
Default				✓
Change				

	[514] FAX Tone Detection		[515] Intercept Time for Internal DISA			[517] DISA AA Wait Time				
Selection	1 Time	2 Times	3 sec	6 sec	9 sec	1 sec	2 sec	3 sec	4 sec	5 sec
Default	✓		✓				✓			
Change										

[516] DISA Incoming Assignment						
Extension port no.	Selection		Extension port no.	Selection	
	Enable	Disable		Enable	Disable
Default: All	✓		13		
01			14		
02			15		
03			16		
04			17		
05			18		
06			19		
07			20		
08			21		
09			22		
10			23		
11			24		
12			✳		

	[519] DISA OGM Mute Time				[520] UCD Group
Selection	0 sec	2 sec	4 sec	6 sec	Extension group no. (1…8)
Default	✓				1
Change					

	[521] UCD Busy Waiting Time	[522] UCD OGM Message Interval Time				[523] UCD Busy Mode	
Selection	1…32 minutes, 1…59 seconds	30 sec	1 min	1.5 min	2 min	Intercept	Disconnect
Default	10 minutes		✓			✓	
Change							

	[524] UCD Intercept Mode		[525] UCD Ringing Time before Intercept					
Selection	Intercept	Disconnect	10 sec	20 sec	30 sec	40 sec	60 sec	120 sec
Default	✓			✓				
Change								

[526] UCD Ringing Time after Intercept						
Selection	10 sec	20 sec	30 sec	40 sec	60 sec	120 sec
Default		✓				
Change						

Extension port no.	[600] Extension Group Assignment								[604] Extension Name Setting
	Extension group no. (1···8)								Extension name (10 character max.)
	Default: All – Group 1								
	1	2	3	4	5	6	7	8	Default: All – Not stored
01									
02									
03									
04									
05									
06									
07									
08									
09									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
✳									

Extension port no.	[601] Call Barring – Class of Service Assignment — Day					[602] Call Barring – Class of Service Assignment — Night					[603] Call Barring – Class of Service Assignment — Lunch				
	COS no. (1…5)					COS no. (1…5)					COS no. (1…5)				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Default: All	✓					✓					✓				
01															
02															
03															
04															
05															
06															
07															
08															
09															
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15															
16															
17															
18															
19															
20															
21															
22															
23															
24															
✳															

Extension port no.	[605] Account Code Entry Mode				[606] Call Transfer to an Exchange Line		[607] Call Forwarding to an Exchange Line	
	Selection				Selection		Selection	
	Option	Forced	Verify-All	Verify-Toll (Call Barring)	Enable	Disable	Enable	Disable
Default: All	✓					✓		✓
01								
02								
03								
04								
05								
06								
07								
08								
09								
10								
11								
12								
13								
14								
15								
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19								
20								
21								
22								
23								
24								
✳								

	[608] Executive Busy Override		[609] Do Not Disturb Override		[610] Parallelled Telephone Connection		[611] TAM Extension	
Extension port no.	Selection		Selection		Selection		Selection	
	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable
Default: All		✓		✓		✓		✓
01								
02								
03								
04								
05								
06								
07								
08								
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21								
22								
23								
24								
✳								

	[612] Room Monitor Assignment		[613] Exchange Line Duration Time Limit Selection		[614] Internal Pulse Detection	
Extension port no.	Selection		Selection		Selection	
	Enable	Disable	Enable	Disable	Enable	Disable
Default: All		✓		✓	✓	
01						
02						
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
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15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
✳						

	[615] LCD Language Assignment						
	Selection				Selection		
	English	Spanish	Portuguese		English	Spanish	Portuguese
Default: All	✓			09			
01				10			
02				11			
03				12			
04				13			
05				14			
06				15			
07				16			
08				✳			

Extension port no.	[700] Doorphone Ringing Assignment — Day								[701] Doorphone Ringing Assignment — Night								[702] Doorphone Ringing Assignment — Lunch							
	1…4: Doorphone no., E: Enable / D: Disable																							
	1		2		3		4		1		2		3		4		1		2		3		4	
	E	D	E	D	E	D	E	D	E	D	E	D	E	D	E	D	E	D	E	D	E	D	E	D
Default: All	✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓	
01																								
02																								
03																								
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24																								
✳																								

Extension port no.	[703] Door Opener Assignment — Day								[704] Door Opener Assignment — Night								[705] Door Opener Assignment — Lunch							
	1…4: Door opener no., E: Enable / D: Disable																							
	1		2		3		4		1		2		3		4		1		2		3		4	
	E	D	E	D	E	D	E	D	E	D	E	D	E	D	E	D	E	D	E	D	E	D	E	D
Default: All		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓
01																								
02																								
03																								
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22																								
23																								
24																								
✳																								

Doorphone no.	[706] Doorphone Ringing / Tone Pattern Selection				[707] Doorphone Access Tone Selection		[708] Doorphone Ringing Time	
	Selection				Selection		Selection	
	Single	Double	Triple	S-Double	Enable	Disable	15 sec	30 sec
Default: All			✓		✓		✓	
1								
2								
3								
4								
✳								

[709] Door Opener Time								
Door opener no.	Selection							
	1 sec	2 sec	3 sec	4 sec	5 sec	6 sec	7 sec	8 sec
Default: All					✓			
1								
2								
3								
4								
✳								

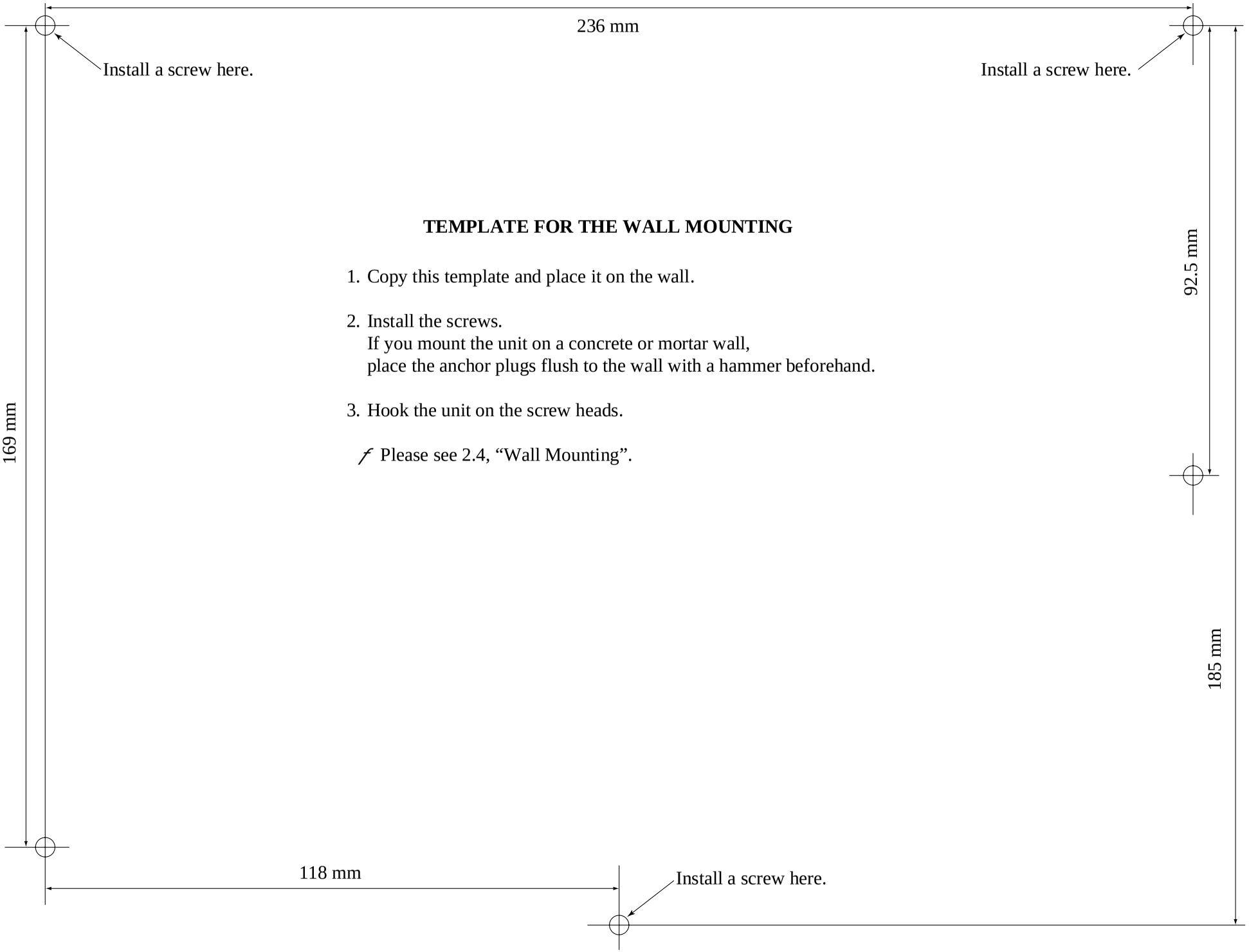
[800] SMDR RS-232C Communication Parameters																		
Selection	New line code		Baud rate							Word length		Parity					Stop bit	
	CR+LF	CR	150	300	600	1200	2400	4800	9600	7	8	Mark	Space	Even	Odd	None	1	2
Default	✓								✓		✓	✓					✓	
Change																		

[801] SMDR Parameter		
	Default	Selection
Page length (4…99)	66	
Skip perforation (0…95)	0	

[802] Incoming/Outgoing Call Selection for Printing			
		Default	Selection
Incoming calls	On	✓	
	Off		
Outgoing calls	On	✓	
	Off		
	Toll		

	[803] Secret Speed Dialling / One-Touch Dialling Printing		[805] SMDR Account Code Selection	
Selection	No Printing	Printing	CODE	INDEX
Default	✓		✓	
Change				

	[806] SMDR Language Assignment		
Selection	English	Spanish	Portuguese
Default	✓		
Change			



TEMPLATE FOR THE WALL MOUNTING

1. Copy this template and place it on the wall.

2. Install the screws.
   If you mount the unit on a concrete or mortar wall,
   place the anchor plugs flush to the wall with a hammer beforehand.

3. Hook the unit on the screw heads.

☞ Please see 2.4, “Wall Mounting”.

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Printed in the United Kingdom **PSQX1708YA** KK1099CM0

Panasonic

Advanced Hybrid System
KX-TA624

Operating Instructions for the Caller ID Card (KX-TA62493)

In this manual, the suffix of each model number is omitted.

The **Caller ID Card** supports the following.

It receives the Caller ID service from the Local Exchange. The Caller ID service provides a display proprietary telephone (KX-T7130) user with the caller's information, such as the name and telephone number, on the exchange line assigned to receive Caller ID service calls. A contract with a Telephone Company is required.

Incoming outside call information from the Caller ID service can be recorded in memory. Also, the extension user can call back the caller easily by checking the call log.

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! • For proprietary telephone operations, all button illustrations are based on the KX-T7130.

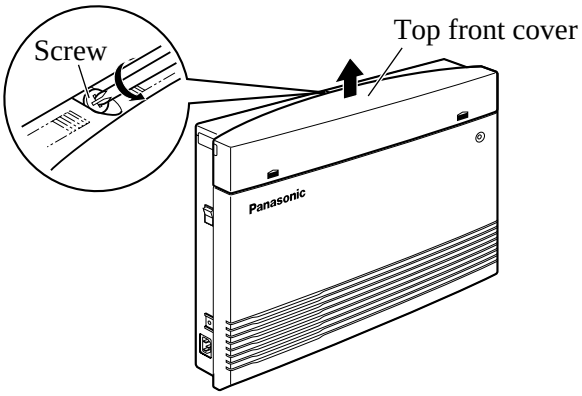
Section 1
Installation

1.1 Caller ID Card Installation

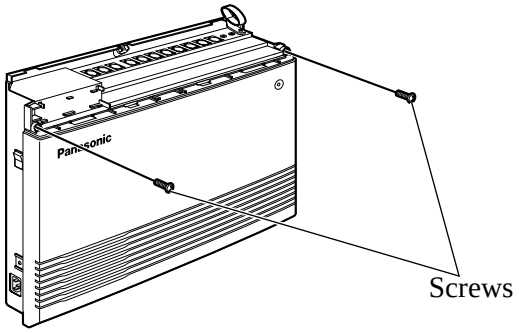
1. Power off the system, and unplug the AC cord.

2. Loosen the screw.

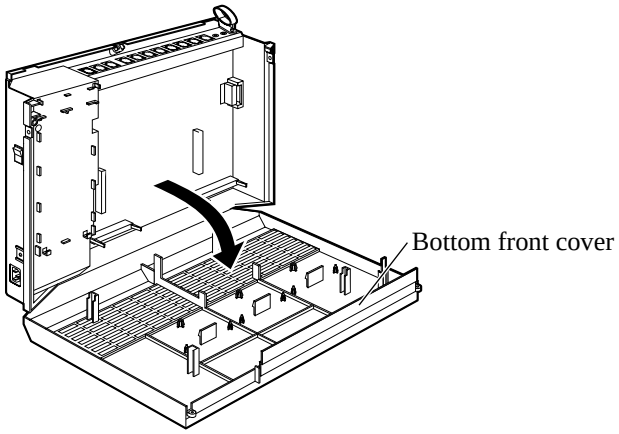
3. Remove the top front cover.



4. Remove the 2 screws.

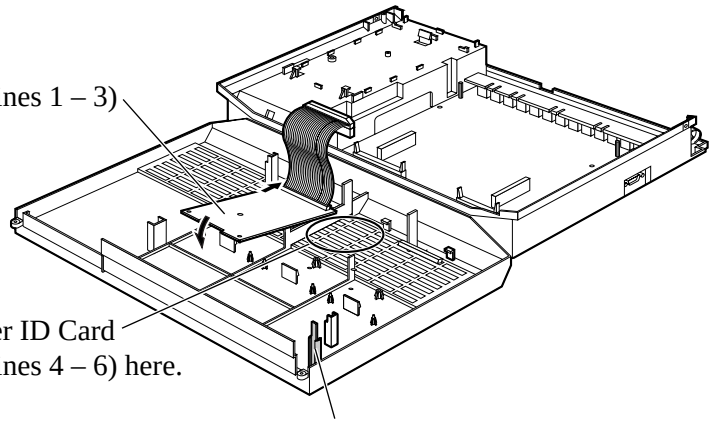


5. Open the bottom front cover.



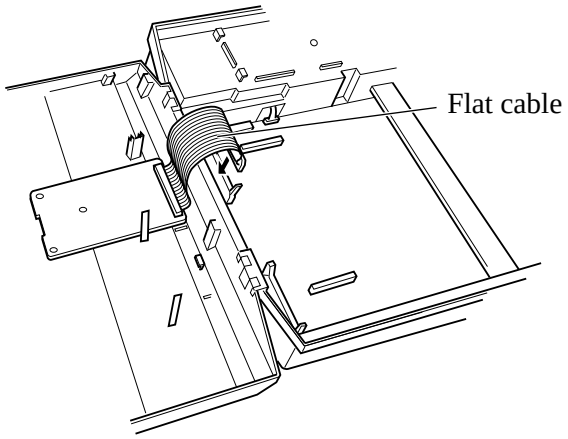
1.1 Caller ID Card Installation

6. Attach the Caller ID Card.



Note
Please do not damage this part.

7. Insert the flat cable to the connector.



8. Close the cover.

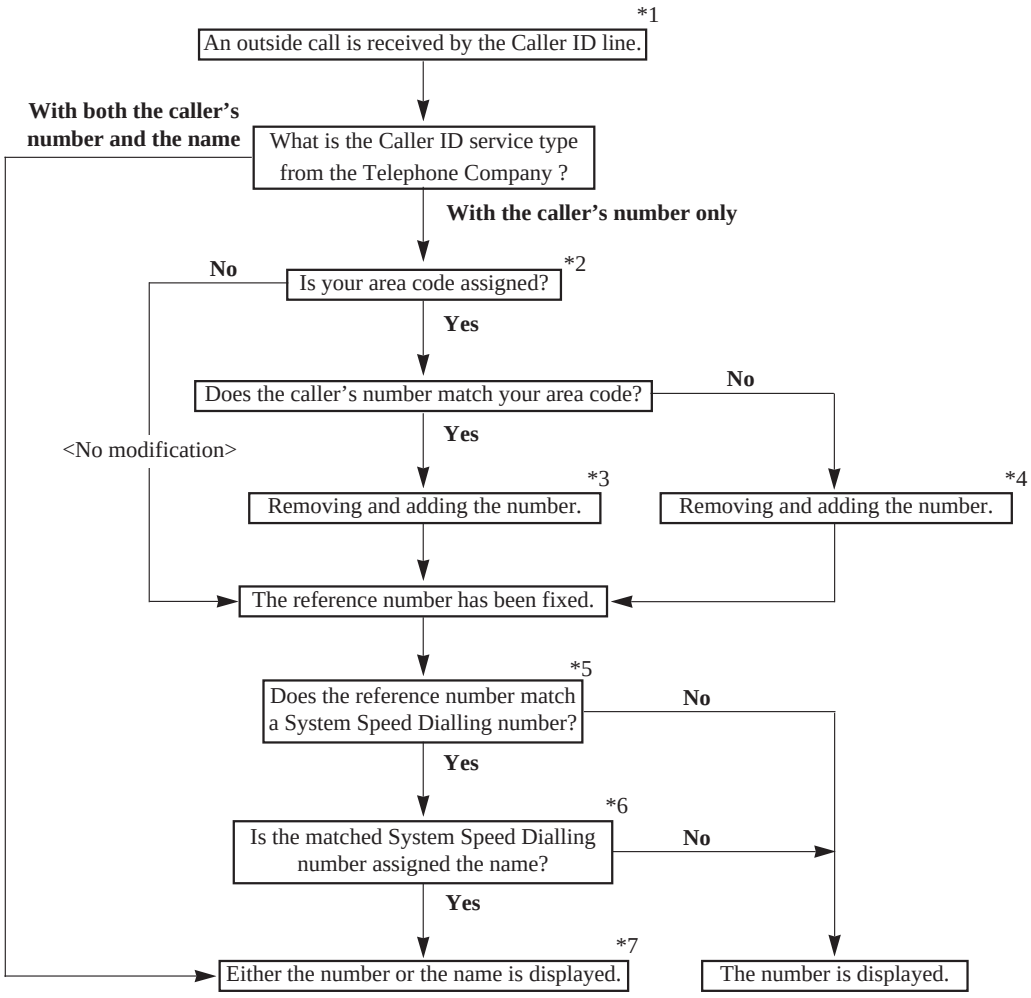
- Be sure the frame of the main unit is connected to the ground (☞ Installation Manual, 2.5 “Frame Ground Connection”).

Caller ID

Provides a display proprietary telephone (KX-T7130) user with the caller's information, such as the name and telephone number, on the exchange line assigned to receive Caller ID service.

- A contract with a Telephone Company is required.
- An optional Caller ID Card must be installed to the system.
- All 6 exchange lines can be supported by installing 2 Caller ID Cards. One Caller ID Card supports 3 exchange lines.
- System Programming is required to execute this feature.
- A display proprietary telephone user can record the caller's information (☞ 2.2 Telephone Features, "Call Log, Incoming"). Up to 20 calls can be logged per extension.
- Only the first 16 digits of the caller's information can be displayed on the LCD while a call is being received, or during a conversation. The first 13 digits are displayed when logged information is shown.
- An assigned name in program [011] "System Speed Dialling Name Setting" will be displayed when the caller's telephone number matches one of System Speed Dialling numbers assigned in program [001] "System Speed Dialling Entry" and a Telephone Company does not provide the caller's name.
- If a Telephone Company provides a caller's name, the name from the Telephone Company will be displayed even when a name assigned in program [011] is effective.
- If both the number and name are available, the user can select the initial display, number or name, by program [904] "Caller ID Log Priority Selection".
- Some Telephone Companies do not provide the caller's name with the Caller ID service.
- The caller's telephone number may not be provided in some cases, for example, an international or mobile telephone call. In this case, the display will show "OUT OF AREA", etc.

Flow chart of Caller ID


*1
An outside call is received by the Caller ID line.
With both the caller's number and the name
What is the Caller ID service type from the Telephone Company ?
With the caller's number only
No
*2
Is your area code assigned?
Yes
Does the caller's number match your area code?
No
Yes
<No modification>
*3
Removing and adding the number.
*4
Removing and adding the number.
The reference number has been fixed.
*5
Does the reference number match a System Speed Dialling number?
No
Yes
*6
Is the matched System Speed Dialling number assigned the name?
No
Yes
*7
Either the number or the name is displayed.
The number is displayed.

Note: The explanation for *1 through *7 is on the next page.

*1: The Caller ID line is assigned in program [900] “Caller ID Assignment”.

*2: Your area code is assigned in program [901] “Caller ID Area Code Assignment”.

*3: The caller’s telephone number is modified according to program [902] “Caller ID Modification for Local Calls”.

*4: The caller’s telephone number is modified according to program [903] “Caller ID Modification for Long Distance Calls”.

*5: System Speed Dialling numbers are assigned in program [001] “System Speed Dialling Entry”. When one of System Speed Dialling numbers includes the reference number, the system regards them as a match. A line access code (9, 0 or 81 through 86) and/or an account code assigned in program [310] “Account Codes” in the System Speed Dialling number are disregarded for the match. The system checks the System Speed Dialling number after a line access code and/or an account code with the reference number.

*6: Assigning a name to a System Speed Dialling number is in program [011] “System Speed Dialling Name Setting”.

*7: The user can select the initial display, number or name, by program [904] “Caller ID Log Priority Selection”. The displayed number is the caller’s telephone number, not the modified one.

Example (With the caller’s number only):

[901] “Caller ID Area Code Assignment”: 201

[903] “Caller ID Modification for Long Distance Calls”: Deleted digits – 3
Added number – 1

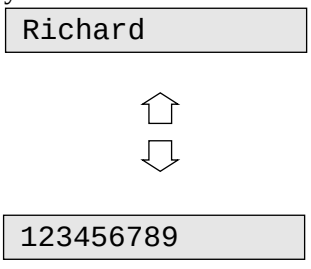
<Caller’s telephone number> → <Modified (reference) number >
123 456 789 → 1456 789

[001] “System Speed Dialling Entry”: (Speed dialling no. 30)
81 ✳✳ 1234 **1456789**
line access code | account code | match

[011] “System Speed Dialling Name Setting”: (Speed dialling no. 30) Richard

[904] “Caller ID Log Priority Selection”: Name

<Display>



• The name and the number can be displayed alternately by pressing Caller ID Selection button (☞ 2.1 Proprietary Telephone Settings, “Customising the Buttons on Your Telephone”, Caller ID Selection Button (Assignment)).

Station Message Detail Recording (SMDR) with the Caller ID Card

When the Caller ID Card is installed, a received caller's telephone number (maximum 16 digits) will be printed out after <incoming> or <DISA incoming> as shown below, if the calling party has enabled Caller ID service. Refer to the Installation Manual, Section 3 Features, "Station Message Detail Recording (SMDR)" for more information about SMDR.

An example of a printed call record:

Date	Time	Ext.	CO	Dial number	Duration	Code
31/12/98	12:52PM	203	05	12345678901234567890123456789012	00:00'16	....
31/12/98	12:53PM	203	02	< incoming >**2013570846**	00:01'43	....
31/12/98	*12:54PM	201	02	< incoming >**1234567890123456**	00:07'48	....
31/12/98	1:04PM	203	06	092...1438	00:00'06	4536
31/12/98	1:04PM	202	05	< DISA incoming >**2013570846**	00:00'09	....
31/12/98	1:05PM	203	01	< DISA incoming >	00:00'08	....
31/12/98	1:06PM	203	01	092123456789	00:00'08	....
31/12/98	1:06PM	202	02	0921234567	00:00'17	....
31/12/98	1:07PM	203	01	0921234567	00:11'00	..13
31/12/98	2:15PM	203	01	0921234567	00:11'00	.201
31/12/98	2:26PM	203	01	F/0927654321	00:03'00	....
31/12/98	2:27PM	216	05	9=0924567123	00:13'55	....
31/12/98	3:25PM		02	< UCD Waiting >	00:11'48	....

- A received caller's telephone number will be printed out only when "With CID" is selected in program [906] "Caller ID SMDR Format".

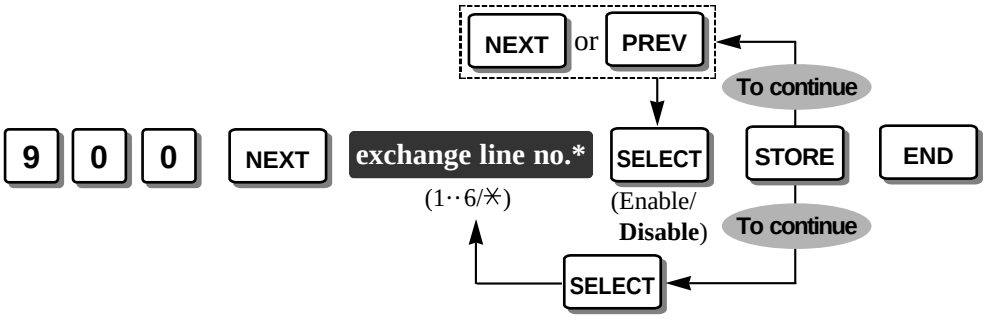
- **Related Feature References**

  Installation Manual, Section 3 Features

  Station Message Detail Recording (SMDR)

[900] *Caller ID Assignment*

Enables or disables the Caller ID feature for each exchange line which has contracted the Caller ID service from a Telephone Company.



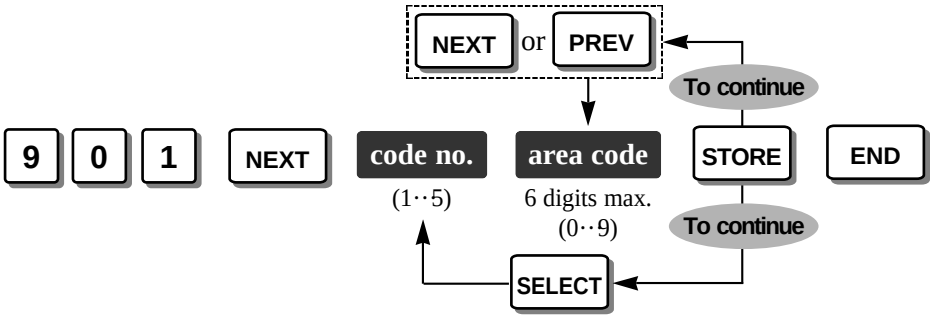
***** Exchange line number: 1 through 6 / ✳ (All exchange lines)

Default All exchange lines – Disable

- The exchange lines, if set to "Enable" in this program, always set the DISA Delayed Answer timer to 6 seconds even if "0 sec" or "3 sec" is selected in program [504] "DISA Delayed Answer Time".

[901] *Caller ID Area Code Assignment*

Assigns your area code (up to 5 codes) which is required to use the Caller ID feature. If the received caller's number has one of the assigned area codes, it is recognised as a local call. If the area code is different, it is recognised as a long distance call. By assigning your area code, the system records the caller's number modified in programs [902] "Caller ID Modification for Local Calls" or [903] "Caller ID Modification for Long Distance Calls".

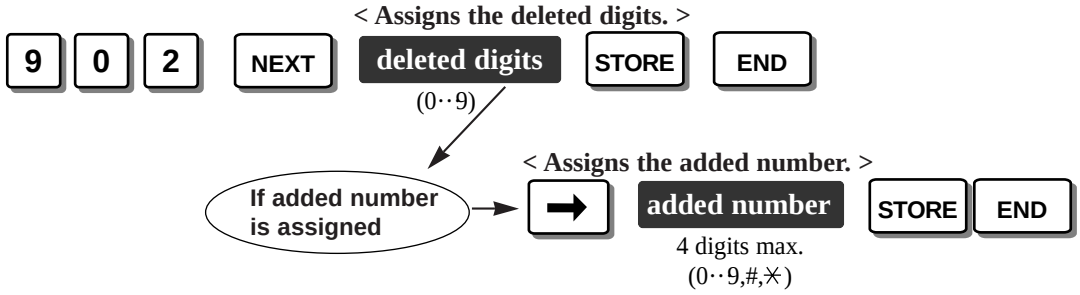


Default Not stored.

- To correct a wrong entry, press the CLEAR button and enter the new one.

[902] *Caller ID Modification for Local Calls*

Assigns the removed digits and added number for a received local call number, which has one of area codes programmed in [901] “Caller ID Area Code Assignment”. This program makes the final number which will be recorded in memory. The extension user can call back the caller easily by checking the call log. Digits are removed from or added to the beginning of the received number.



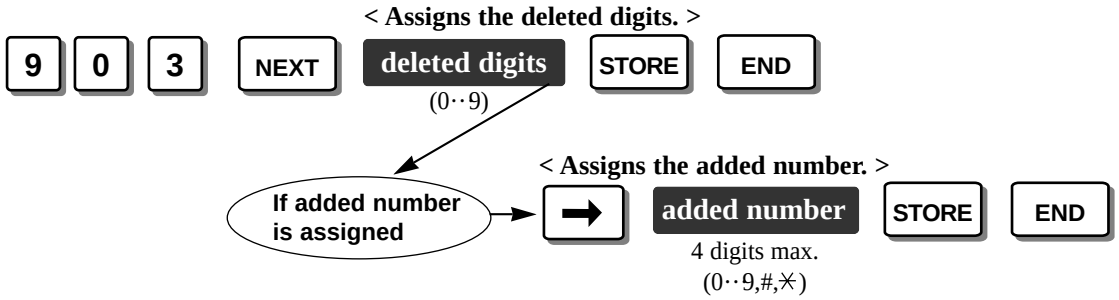
Example:
[901]: 201
[902]: Deleted digits – 3 / Added number – Not stored
Caller’s number provided by the Local Exchange: 2011234567
Logged (modified) number : 1234567

Default Deleted digits – 3 / Added number – Not stored.

- Program [901] “Caller ID Area Code Assignment” is required for this program.
- To correct a wrong entry, press the CLEAR button and enter the new one.

[903] *Caller ID Modification for Long Distance Calls*

Assigns the removed digits and added number for a received long distance call number, which does not have any area codes programmed in [901] “Caller ID Area Code Assignment”. This program makes the final number which will be recorded in memory. The extension user can call back the caller easily by checking the call log. Digits are removed from or added to the beginning of the received number.



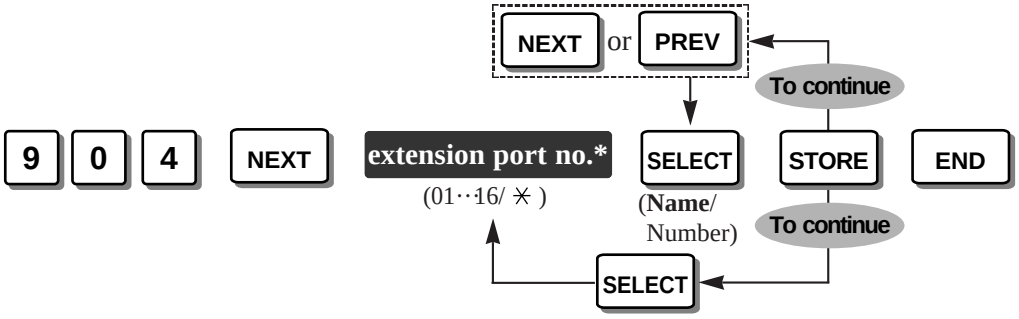
Example:
[901]: 201
[903]: Deleted digits – 0 (No deletion) / Added number – 1
Caller’s number provided by the Local Exchange: 7149876543
Logged (modified) number : 17149876543

Default Deleted digits – 0 (No deletion) / Added number – 1

- Program [901] “Caller ID Area Code Assignment” is required for this program.
- To correct a wrong entry, press the CLEAR button and enter the new one.

[904] *Caller ID Log Priority Selection*

Selects the first display of an incoming outside call by the Caller ID service. Either the name or number can be selected if the Caller ID service supports both the name and number.



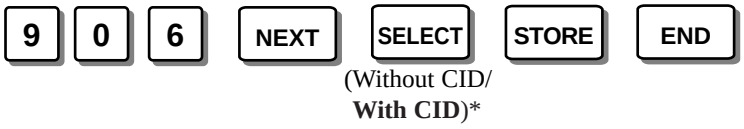
***** Extension port number: 01 through 16 / ✳ (All extension ports)

Default All extension ports – Name

- This program is available when your Caller ID service provides both the name and number. If only the number is provided, this program is not necessary.

[906] *Caller ID SMDR Format*

Selects whether a Caller ID number is printed out or not on an SMDR printout.



***** Without CID (Not printed) / With CID (Printed)

Default With CID

- Even if a name is also sent by the Caller ID service, only the number is printed.

1.4 Programming Tables

[900] Caller ID Assignment								
Selection	Default	Exchange line no. (1⋯6, ⚹: All)						
	All	1	2	3	4	5	6	⚹
Enable								
Disable	✓							

[901] Caller ID Area Code Assignment	
CODE no.	Parameter: 6 digits max., 0 – 9
Default	All: Not stored
1	
2	
3	
4	
5	

	[902] Caller ID Modification for Local Calls		[903] Caller ID Modification for Long Distance Calls	
Selection	Default	Change	Default	Change
Number of digits to be deleted (0⋯9, 0: no deletion)	3		0	
Number to be added (4 digits max.)	blank (not stored)		1	

[904] Caller ID Log Priority Selection					
Extension jack no.	Selection		Extension jack no.	Selection	
	Number	Name		Number	Name
Default: All		✓	13		
01			14		
02			15		
03			16		
04			17		
05			18		
06			19		
07			20		
08			21		
09			22		
10			23		
11			24		
12			⚹		

[906] Caller ID SMDR Format		
Selection	Without CID	With CID
Default		✓
Change		

Section 2
Operations

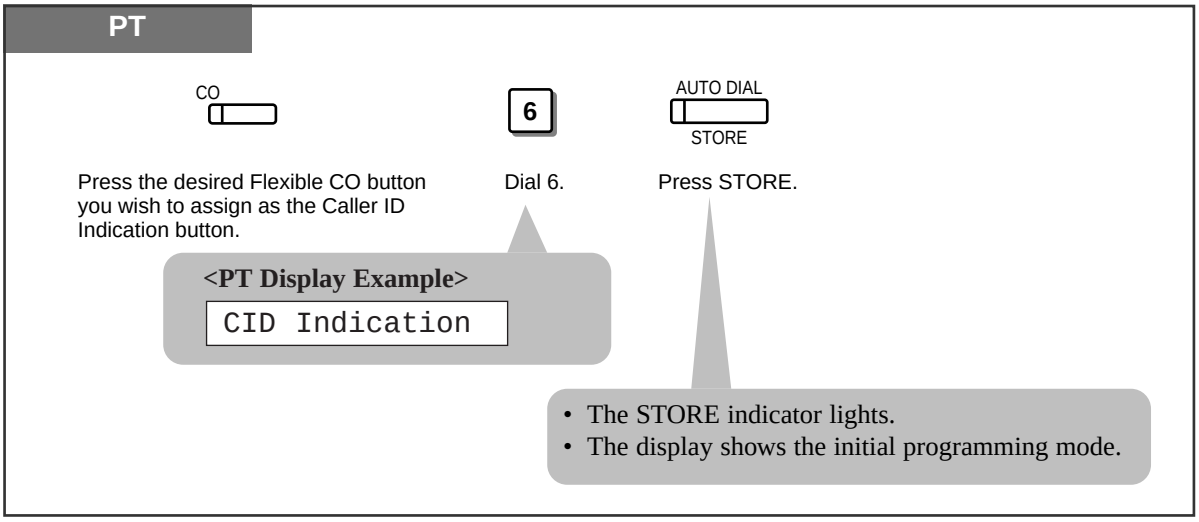
2.1 Proprietary Telephone Settings

Customising the Buttons on Your Telephone

Caller ID Indication Button (Assignment)

Allows you to assign a Flexible line key as the Caller ID Indication button. The Caller ID Indication button can be used in the following cases.

1) Informing you that there is new caller information logged by lighting the indicator
2) Recording caller's information in memory during a conversation
3) Checking logged caller's information while on-hook
4) Calling back the logged number



- Be sure the handset is on the cradle and the SP-PHONE button is off.
- To program, set the MEMORY switch on the proprietary telephone to "PROGRAM".
- After programming, return the MEMORY switch to the "SET" position.

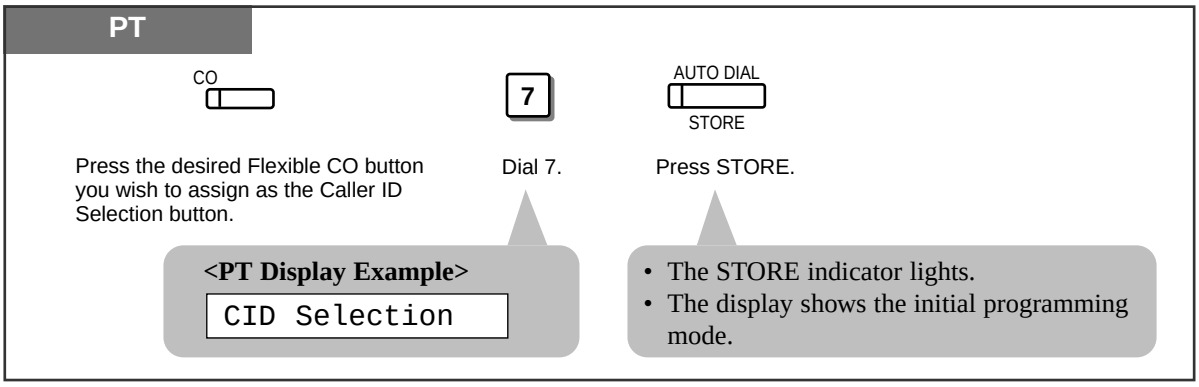
- 2.2 Telephone Features, "Call Information/Log, Incoming"
- 2.2 Telephone Features, "Call Log, Incoming"

2.1 Proprietary Telephone Settings

Caller ID Selection Button (Assignment)

Allows you to assign a Flexible line key as the Caller ID Selection button. The Caller ID Selection button can be used in the following cases.

1) Confirming a caller's information while receiving a call or during a conversation
2) Checking the number of logged calls
3) Informing you when no more caller's information can be logged by lighting the indicator



- Be sure the handset is on the cradle and the SP-PHONE button is off.
- To program, set the MEMORY switch on the proprietary telephone to "PROGRAM".
- After programming, return the MEMORY switch to the "SET" position.

- 2.2 Telephone Features, "Call Information/Log, Incoming"
- 2.2 Telephone Features, "Call Log, Incoming"

Call Information/Log, Incoming

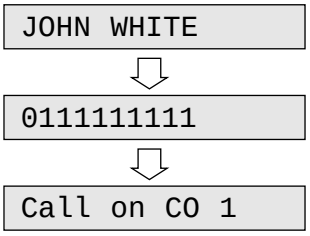
Provides you with the caller's telephone number and name simultaneously on the exchange line assigned to receive Caller ID service calls, if the Caller ID service supports both the telephone number and name.
If the call is not answered, the call information is automatically recorded in memory (☞ 2.2 Telephone Features, "Call Log, Incoming").

Display Operation (— for the KX-T7130 only)

While receiving an incoming call (on-hook) or during a conversation (off-hook), the display shows the caller's telephone number or name.

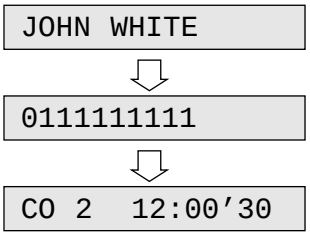
While receiving an incoming call

- If you want to see other information, press the **Caller ID Selection** button. The display changes as follows.



During a conversation

- Press the **Caller ID Selection** button to see other information. The display changes as follows.

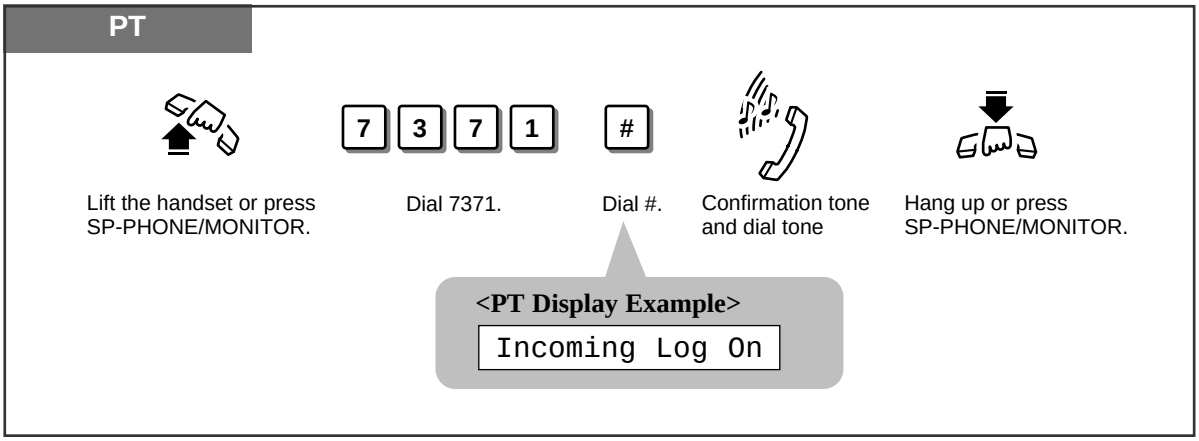


- The Caller ID Indication button indicator light may turn on when a call is received.
- You can modify and call back the logged numbers. Refer to 2.2 Telephone Features, "Call Log, Incoming".
- System Programming determines which is displayed first, the name or number.
- You can program whether to print out a Caller ID number on the SMDR or not by System Programming.

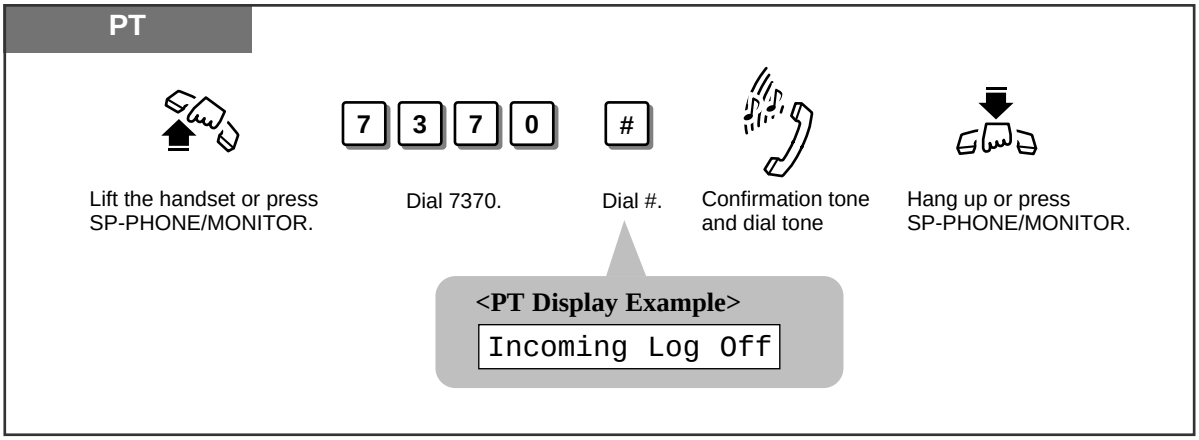
Call Log, Incoming

If you do not answer a call, your extension (KX-T7130 only) automatically records the incoming outside call information from the Caller ID service, and the Caller ID Indication button indicator lights. Up to 20 calls can be logged per extension. When the call log is full (20 calls are stored), you can select how the twenty-first call is treated. Either a new call can be disregarded or the new call can overwrite the oldest call that you have already confirmed (Default: Record the new call.).
You can also modify and call back the logged numbers.
Even if you answer a call, the call information can be recorded by pressing the Caller ID Indication button during the conversation.

Overwriting the call log



Disregarding the twenty-first call



Checking

Display Operation (— for the KX-T7130 only)

When the Caller ID Indication button indicator is red, there are new calls logged.

1. Press the **Caller ID Selection** button to confirm the number of logged calls.
<Example>
If there are 2 unchecked calls and 3 checked calls:

```
New:02  Old:03
```

- The above information will be displayed for 3 seconds.

```
01:0111111111
```

2. Press the **Caller ID Indication** button while on-hook to see the incoming call information.
- The new information that you have not checked will be displayed first.

```
02:0924773333
```

3. You can check another caller's information by pressing the **Caller ID Indication** button again.
After displaying all of the new information, the old information you have already checked will be displayed.
- To modify the telephone number, use the HOLD button to erase from the first digit. "0 to 9, ✳, # and PAUSE" can be used to add numbers from the first digit.
- To clear the displayed information, press the TRANSFER button.
- To clear all logged call information, go off-hook and press 70✳#.
The display shows as follows.

```
CID Log Clear
```

- To return to the initial display, go off-hook and on-hook, or wait for 20 seconds.
- Pressing the Caller ID Selection button provides you with further information about the party.
The display changes as follows.
<Example>
If the information is stored in log 03,

```
03:BOB HANKS
```
— caller's name

⇩

```
03:0011223344
```
— caller's number

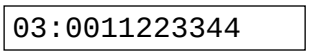
⇩

```
03:30Oct 09:00PM
```
— date and time

- If "OUT OF AREA" is displayed, the call may be from out of the calling area.
- If "LONG DISTANCE" is displayed, it may be a long distance call.
- If "PRIVATE" is displayed, the caller chose not to show their information.

Calling back

Display Operation (— for the KX-T7130 only)



1. Confirm the number displayed in step 2 or 3 of “Checking” (on the previous page), and lift the **handset** or press the **SP-PHONE** button.

2. Press the **Caller ID Indication** button.
   - You may press a line key first to select a specified exchange line. The last displayed number is dialled.

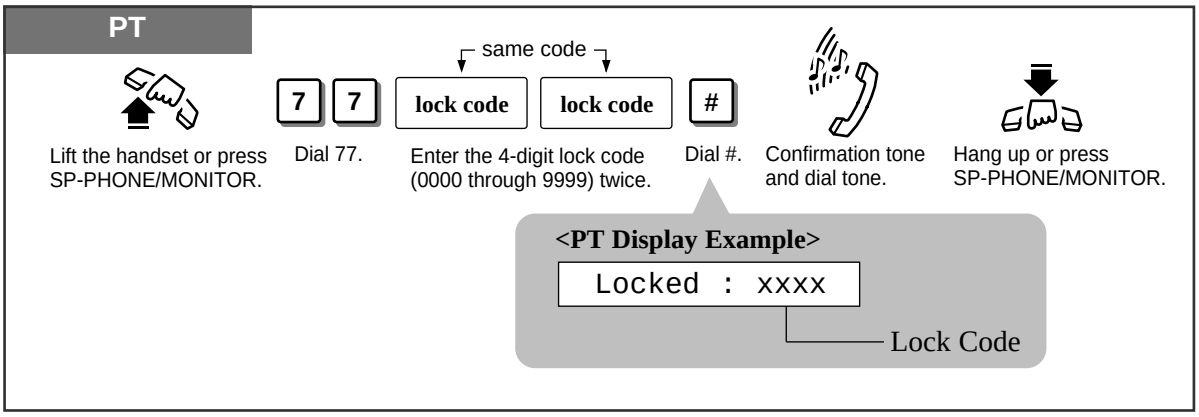
PT

- When “Disregarding the twenty-first call” has been set and 20 calls are logged, or when “Overwriting the call log” has been set and all 20 old information has been overwritten, the Caller ID Selection button indicator lights and informs you that no more calls can be logged.

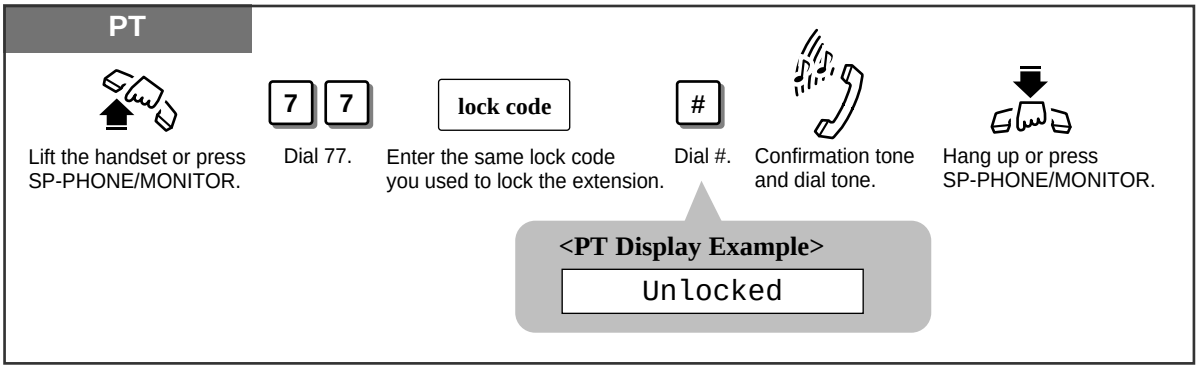
Electronic Extension Lockout

Allows you to lock your extension so that the “Call Log, Incoming” feature is not shown on the display when you press the Caller ID Indication button, if you do not want others to see the information. This feature also prevents others from making outside calls from your extension.

Locking



Unlocking



! PT • The operator or manager can cancel this feature for all extensions (Electronic Extension Lockout — CANCEL ALL).

PT • “Remote Extension Lock” overrides this feature. If the operator or manager sets Remote Extension Lock on the extension you have already locked, you cannot unlock it.

Operating Instructions, Section 1 Operations

- 1.6 Before Leaving Your Desk, “Locking Your Telephone (Electronic Extension Lockout)”
- 1.8 Operator / Manager Service Features, “Electronic Extension Lockout — CANCEL ALL”
- 1.8 Operator / Manager Service Features, “Remote Extension Lock”

2.3 Display Example

Due to the Trilingual Selection Feature, you can select the display in English, Spanish or Portuguese by System Programming. The left part is the English display and the right part is the Spanish display.

ENGLISH DISPLAY	SPANISH DISPLAY	DESCRIPTION
CID Log Clear	RID Despejado	Cleared all logs.
Incoming Log Off	Registro ID Off	Cancelled “Incoming Call Log”.
Incoming Log On	Registro ID On	“Incoming Call Log” is set.
Locked:xxxx	Bloqueado	Completed setting “Electronic Extension Lockout”.
New:02 Old:03	Nue:02 Ant:03	Confirming the number of logged calls.
Unlocked	Desbloqueada	Cancelled “Electronic Extension Lockout”.

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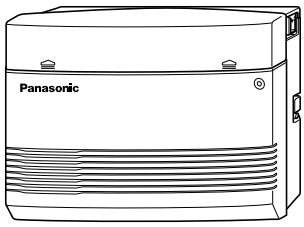
Panasonic House, Willoughby Road, Bracknell, Berkshire RG12 8FP

Printed in the United Kingdom **PSQX1744YA** KK1099CM1109SM

Panasonic

Advanced Hybrid System

Operating Instructions



MODEL NO. KX-TA624

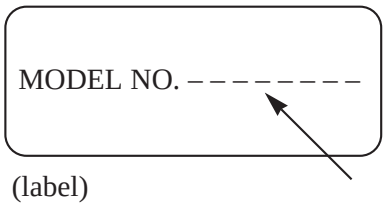
Please read this manual before connecting the Advanced Hybrid System.

System Components

	Model No.	Description
Service Unit	KX-TA624	Advanced Hybrid System
Telephone	KX-T7020 KX-T7130 KX-T7050	Proprietary Telephone (12 COs) Proprietary Telephone with LCD (12 COs) Proprietary Telephone (12 COs)
Optional Equipment	KX-T7040	DSS Console (32 DSSs and 16 Feature buttons)
	KX-TA62460 KX-TA62474 KX-TA62477 KX-TA62491	Doorphone/Door Opener Card Expansion Card (up to 8 extension lines for a single line telephone) Expansion Card (up to 3 exchange lines and 8 extension lines) OGM and FAX Detection Card
	KX-T30865	Doorphone

NOTICE:

- A Proprietary Telephone is abbreviated as PT.
- A Single Line Telephone is abbreviated as SLT.
- This Operating Instructions does not show the complete model number that indicates the country where your models should be used. The model number of your unit is found on the label affixed to the unit.



(label)

Satisfactory performance cannot be guaranteed for each combination of host and subsidiary equipment.

‘Prevention of access by user.’ This equipment is intended to be accessible only by authorised personnel. It must be installed in a locked room or similar environment, so that user access is prevented. Failure to prevent such user access will invalidate any approval given to this equipment.

Precautions

When using the KX-T7000 series, keep the following conditions in mind:

- This apparatus is designed to be installed and operated under controlled conditions of ambient temperature and a relative humidity not greater than 60%.
- Avoid installing the apparatus in damp or humid environments, such as in bathrooms or near swimming pools.
- 999 or 112 can be dialled on the apparatus after accessing the exchange line for the purpose of making outgoing calls to the BT emergency service.
- During dialling, the apparatus may tinkle the bells of other telephones using the same line. This is not a fault and we advise you not to call the Fault Repair Service.
- If the apparatus does not operate properly, disconnect the unit from the telephone line cord and then connect again.
- If there is any trouble, unplug the extension line and connect a known working phone. If the known working phone operates properly, have the defective phone repaired by your maintainer or Panasonic dealer. If the known working phone does not operate properly, check the Advanced Hybrid System and the Internal extension wiring.
- Keep the unit away from heating appliances and electrical noise generating devices such as fluorescent lamps and motors.
- The unit should be kept free of dust, moisture and vibration, and should not be exposed to direct sunlight.
- Do not use benzine, thinner, or the like, or any abrasive powder to clean the cabinet. Wipe it with a soft cloth.
- Do not use any handset other than a Panasonic handset.
- This apparatus is capable of being used in conjunction with hearing aids fitted with inductive coil pick-ups. The handset should be held as for normal conversation. For operation the hearing aid should be set to its "T" position or as directed in the operating instructions for the hearing aid.

- These apparatuses are designed to aid the visually handicapped to locate dial keys and buttons.
- Never attempt to insert wires, pins, etc. into the vents or other holes of this unit.

APPROVED for connection to telecommunication systems specified in the instructions for use subject to the conditions set out in them.

610186

Warning:

This is a Class A Product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

This unit complies with the EU Directives.

CE

73 / 23 / EEC	"Electrical equipment for use within certain voltage limits."
89 / 336 / EEC	"Electromagnetic compatibility" (basic standard)
92 / 31 / EEC	"Electromagnetic compatibility" (amendment)
93 / 68 / EEC	"Marking"

The CE mark on this unit certifies compliance with the above mentioned Directives.

Precautions

WARNING

THIS UNIT MAY ONLY BE INSTALLED AND SERVED BY QUALIFIED SERVICE PERSONNEL.

WHEN A FAILURE OCCURS WHICH RESULTS IN THE INTERNAL PARTS BECOMING ACCESSIBLE, DISCONNECT THE POWER SUPPLY CORD IMMEDIATELY AND RETURN THIS UNIT TO YOUR DEALER.

DISCONNECT THE TELECOM CONNECTION BEFORE DISCONNECTING THE POWER CONNECTION PRIOR TO RELOCATING THE EQUIPMENT. THEN RECONNECT THE POWER FIRST.

THIS UNIT IS EQUIPPED WITH AN EARTHING CONTACT PLUG. FOR SAFETY REASONS, THIS PLUG MUST ONLY BE CONNECTED TO AN EARTHING CONTACT SOCKET WHICH HAS BEEN INSTALLED ACCORDING TO REGULATIONS.

THE POWER SUPPLY CORD IS USED AS THE MAIN DISCONNECT DEVICE, ENSURE THAT THE SOCKET-OUTLET IS LOCATED/INSTALLED NEAR THE EQUIPMENT AND IS EASILY ACCESSIBLE.

TO PREVENT THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

For your future reference

SERIAL NO. _____ DATE OF PURCHASE _____
(found on the bottom of the unit)

NAME OF DEALER _____

DEALER'S ADDRESS _____

Structure of the Manual

This manual consists of the following sections.

Section 1. Operations

Describes the features and their operation. It also provides information about the programming required, conditions and connection references for each feature.

Section 2. Appendix

Provides the Tone/Ring Tone List, LED Indication, Feature Number List and the Telephone Troubleshooting.

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Description of the Symbols Mainly Used in this Manual

Additional information and conditions.

The feature or program references.

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Section 1

Operations

What kind of telephone do you use?

In this manual, you will find how to operate the feature depending on your type of telephone. If you use single line devices such as a single line telephone or data terminal, you will follow the steps which enter a feature number. If you use single line devices which do not have a "✳" or "#" key, it is not possible to access features that have "✳" or "#" in their access numbers.

If you use a Panasonic proprietary telephone which has a special function button and/or a display, you will follow the button or display operation for easy access. If you use a Panasonic proprietary telephone which does not have a function button, you may change one of the unused buttons to a specific function button. Refer to Section 1.2, "Proprietary Telephone Settings".

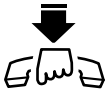
Panasonic proprietary telephones have Light Emitting Diode (LED) button indicators, so you can see the line status by the lighting patterns. Refer to Section 2.2, "LED Indication".

Please use the proper operation for your telephone.

Description of the Symbols Used in this Manual

In this manual, many symbols are used. Some of the symbols need explanation. Those are described below.

Lift the handset, or press the SP-PHONE or MONITOR button (Off-hook).



Replace the handset, or press the SP-PHONE or MONITOR button (On-hook).

Number keys on the telephone — depends on the condition.

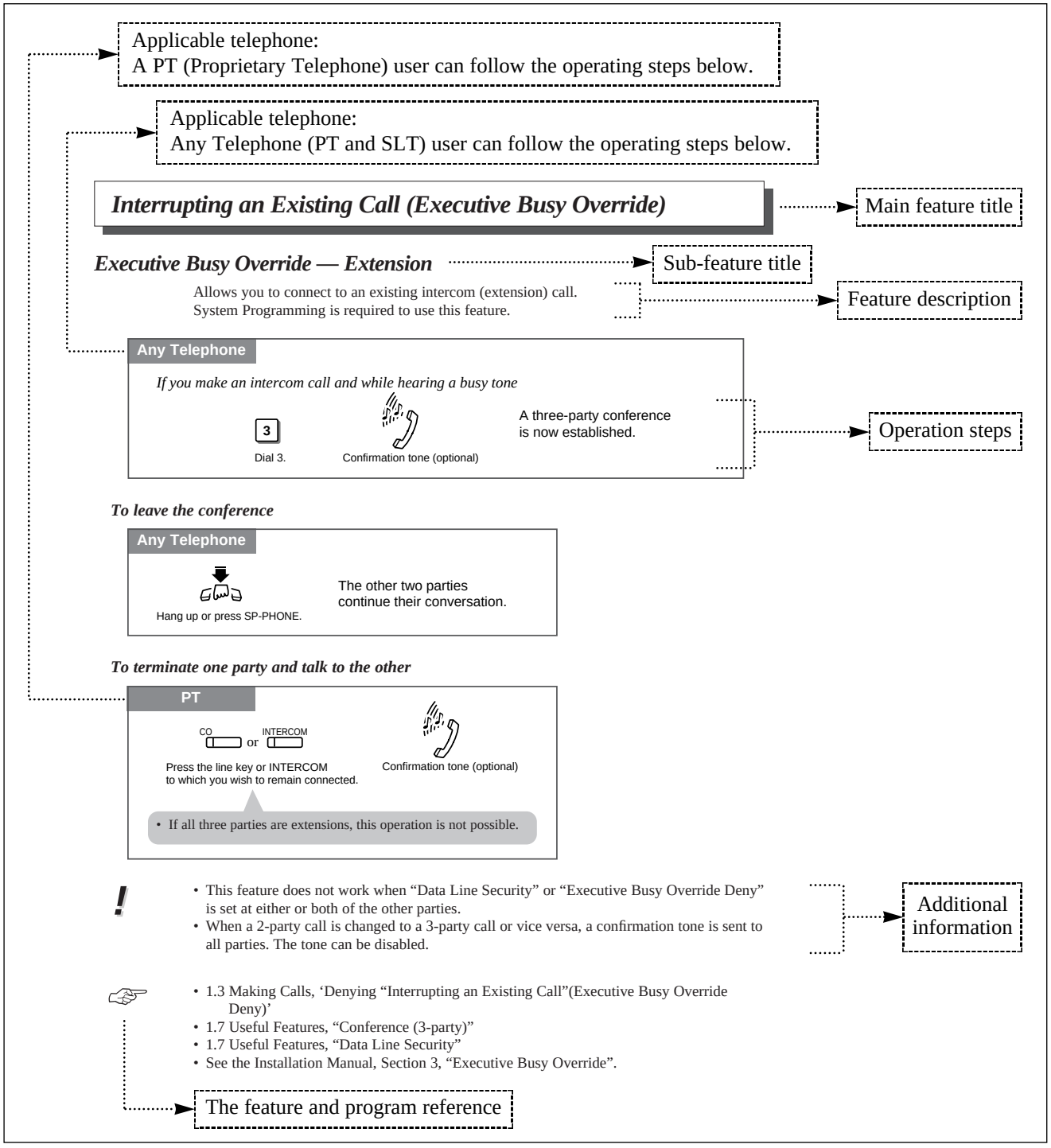
Recall button on a single line telephone.

Tones which vary depending on the condition.
Refer to "Tone / Ring Tone List" (Section 2.1).

- For proprietary telephone operations, all button illustrations are based on the KX-T7130 model.

Operating example

Example: "Interrupting an Existing Call (Executive Busy Override)",
Executive Busy Override — Extension


Applicable telephone:
A PT (Proprietary Telephone) user can follow the operating steps below.
Applicable telephone:
Any Telephone (PT and SLT) user can follow the operating steps below.
Interrupting an Existing Call (Executive Busy Override)
Main feature title
Executive Busy Override — Extension
Sub-feature title
Allows you to connect to an existing intercom (extension) call.
System Programming is required to use this feature.
Feature description
Any Telephone
If you make an intercom call and while hearing a busy tone
3
Dial 3.
Confirmation tone (optional)
A three-party conference is now established.
Operation steps
To leave the conference
Any Telephone
Hang up or press SP-PHONE.
The other two parties continue their conversation.
To terminate one party and talk to the other
PT
CO
or
INTERCOM
Press the line key or INTERCOM to which you wish to remain connected.
Confirmation tone (optional)
• If all three parties are extensions, this operation is not possible.
• This feature does not work when "Data Line Security" or "Executive Busy Override Deny" is set at either or both of the other parties.
• When a 2-party call is changed to a 3-party call or vice versa, a confirmation tone is sent to all parties. The tone can be disabled.
Additional information
• 1.3 Making Calls, 'Denying "Interrupting an Existing Call"(Executive Busy Override Deny)'
• 1.7 Useful Features, "Conference (3-party)"
• 1.7 Useful Features, "Data Line Security"
• See the Installation Manual, Section 3, "Executive Busy Override".
The feature and program reference

- If your telephone is not noted in the operation steps (ex. only "PT" is noted and you are using a single line telephone), this means your telephone cannot execute that feature.
- If your telephone can perform several operations for one feature, you can select the method according to your needs.

1.2 Proprietary Telephone Settings

If you use a Panasonic proprietary telephone, you can customise your telephone functions. For example, you can change the initial settings according to your needs or the button functions on your telephone. To program, you need to switch your telephone to the programming mode. During the programming mode, your telephone is busy to outside callers. If you want to make a call, you must exit from programming mode.

- This feature cannot be used with a single line telephone.
- Be sure the handset is on the cradle and the SP-PHONE button is off.
- To program, set the MEMORY switch on the proprietary telephone to “PROGRAM”. When you enter the Programming mode, the display shows the following message as the initial programming mode.

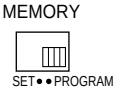
  ```
  PITS-PGM NO? →
  ```

  The display also gives you helpful or stored data information related to the programming steps. You can also refer to the “Display Example” in the Appendix (Section 2.4).
- After programming, return the MEMORY switch to the “SET” position.
- If you move your desk and change take your telephone with you, reset as desired. Your settings will not remain in your telephone but will remain at your previous extension port.
- During the programming mode, your extension is treated as a busy extension.

To enter the Programming Mode

PT

Be sure the telephone is idle and on-hook.

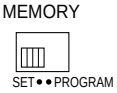


Set the MEMORY switch to “PROGRAM” .

To exit the Programming Mode

PT

When the display shows the initial programming mode;



Set the MEMORY switch to “SET”.

Programming is completed and the normal operation resumes.

When storing data

After pressing the STORE button to store data, you will hear one of the following tones.
— Confirmation tone (1 beep): storage is completed.
— Confirmation tone (2 beeps): the data is the same as the last entry.
— Alarm tone (3 beeps): the entry is not valid.

Customising Your Telephone Functions

You can change the initial settings of your telephone. Check the available items in the list and change the settings, if required.

Preferred Line Assignment — Outgoing

Idle Line Preference: You can access any permitted idle exchange line to make a call directly by going off-hook.

Prime Line Preference: You can access a predetermined exchange line directly by going off-hook.

No Line Preference: (default) You cannot access an exchange line by going off-hook. Choose the exchange line using 9 or 0, or a line key.

SELECTION	PROGRAMMING INPUT
❑ Idle Line Preference.	1 2 AUTO DIAL STORE
❑ Prime Line Preference.	1 3 **exchange line no.** (Enter the exchange line number (1 through 6).) AUTO DIAL STORE
❑ No Line Preference.	1 1 AUTO DIAL STORE

- Setting a new line preference feature will cancel the previous setting.
- The user can override the Idle/Prime Line Preference temporarily to select a specific line. To select it, press the desired line access key (INTERCOM or line key) before going off-hook or pressing the SP-PHONE/MONITOR button.
- If there are only 3 lines in the system, exchange line numbers 4 through 6 cannot be used.

1.2 Proprietary Telephone Settings

Preferred Line Assignment — Incoming

No Line Preference: When an incoming outside call is received, the extension user must go off-hook and then press the flashing line key.

Prime Line Preference: When incoming exchange line calls are received at the same time, you can receive the call on the preferred exchange line first only by going off-hook.

Ringing Line Preference: (default) When an incoming outside call is received, you can receive the call ringing at your telephone by going off-hook.

SELECTION	PROGRAMMING INPUT
❑ No Line Preference.	2 1 AUTO DIAL STORE
❑ Prime Line Preference.	2 3 **exchange line no.** Enter the exchange line number (1 through 6). AUTO DIAL STORE
❑ Ringing Line Preference.	2 2 AUTO DIAL STORE

- Setting a new line preference feature will cancel the previous setting.
- In “Prime Line Preference” mode, if incoming exchange line calls are received at the same time except for the preferred exchange line, you must go off-hook and then press the line key whose indicator is flashing red quickly.

Exchange Line Ringing Selection

You can select whether the extension will ring or not when an outside call is received at your extension.

PROGRAMMING INPUT
3 **exchange line no.** Enter the exchange line numbers you want to ring (1 through 6). AUTO DIAL STORE

- The “Flexible Ringing Assignment” should be set to “Enable”. (See the Installation Manual.)
- When an outside call is received at your extension but does not ring, the line key will flash. If you want to answer the outside call, press the flashing line key.

1.2 Proprietary Telephone Settings

Intercom Alert Assignment

The type of intercom alerting signal (tone/voice) can be selected by programming.

Voice Call: Call arrival is indicated by the caller announcing themselves through the speaker on the receiving extension.
Tone Call (default): Normal ringing is heard at the receiving extension.

SELECTION	PROGRAMMING INPUT
❑ Voice Call	4 2 AUTO DIAL STORE
❑ Tone Call (Cancels the Voice Call.)	4 1 AUTO DIAL STORE

Call Waiting Tone Selection

You can select the type of call waiting tone, either Tone 1 (default) or Tone 2.

SELECTION	PROGRAMMING INPUT
❑ Tone 1	5 1 AUTO DIAL STORE
❑ Tone 2	5 2 AUTO DIAL STORE

- 1.5 During a Conversation, “Call Waiting”
- 2.1 Tone / Ring Tone List

Proprietary Telephone Setting – Data Default Set

Allows you to reset the proprietary telephone’s settings to the default settings.

- Preferred Line Assignment — Outgoing (default: No Line Preference)
- Preferred Line Assignment — Incoming (default: Ringing Line)
- Exchange Line Ringing Selection (default: Ring – all exchange lines)
- Intercom Alert Assignment (default: Tone Call)
- Call Waiting Tone Selection (default: Tone 1)

OPERATION
* AUTO DIAL STORE

- This feature also cancels the Handsfree Answerback feature. The operation of the AUTO ANSWER/MUTE button in the Room Monitor feature is also affected.

Customising the Buttons on Your Telephone

Changing the Flexible Buttons

You can change the flexible buttons on your telephone to certain function buttons. For example, if your telephone has more line keys than available exchange lines, you may change the unused line keys to One-Touch Dialling buttons, etc.
The 4 types of flexible buttons are as follows:

- **Flexible Line Keys** (located on a PT only)
- **Flexible DSS Buttons** (located on a DSS Console only)
- **Programmable Feature (PF) Buttons** (located on a PT and DSS Console)
- **Flexible MESSAGE Buttons** (located on a PT)

Check the required operation first. If your telephone is not provided with the button you want, you can assign the button using this program.

FUNCTION	PROGRAMMABLE BUTTON			
	LINE	DSS	PF	MESSAGE
DSS (Direct Station Selection)	✔	✔		✔
One-Touch Dialling	✔	✔	✔	✔
CONF (Conference)	✔			
FWD/DND (Forward/Do Not Disturb)	✔			
SAVE	✔			
Log-In/Log-Out	✔			
Single Exchange Line (S-CO)	✔			
Other Exchange Lines (O-CO)	✔			
Trunk Group (G-CO)	✔			
MESSAGE (Message Waiting)				✔
Day		✔		
Night		✔		
Lunch		✔		
Extension Lock		✔		

"✔" indicates that the feature is available.

- **To confirm the stored function data**
  Press the button you want to confirm.
- As to the buttons on your proprietary telephone, please refer to your proprietary telephone manual.

1.2 Proprietary Telephone Settings

Line Access Keys

One of the following 3 types of line keys must be used to select an exchange line when making a call.

- **Trunk Group (G-CO) key**
- **Other Exchange Lines (O-CO) key**
- **Single Exchange Line (S-CO) key**

- A flexible line key can be assigned as a Line Access Key (G-CO, O-CO or S-CO) in Proprietary Telephone Settings. Once a flexible line key is assigned as a Line Access Key, it provides the line status using lighting patterns and colour indication. Please refer to “2.2 LED Indication”.
- You can set the G-CO and S-CO keys on one telephone. Incoming and outgoing calls on the line are shown on the key in the following priority. S-CO > G-CO

Single Exchange Line (S-CO) Key

A S-CO key is an exchange line access key. This allows you to access a specific line by pressing a S-CO key. An incoming call can be directed to a S-CO key.

PT

CO	0	exchange line no.	AUTO DIAL / STORE
Press the programmable button.	Dial 0.	Enter an exchange line number (1 through 6).	Press STORE.

- Only one S-CO key can be assigned to an exchange line.
- The same exchange line can be assigned as a S-CO key and G-CO key.

Other Exchange Lines (O-CO) Key

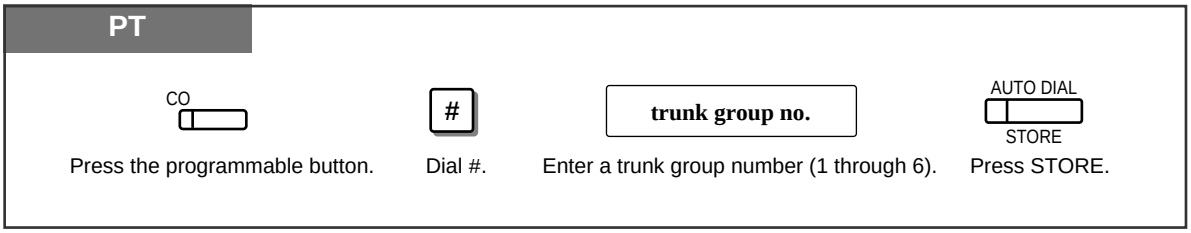
Exchange lines which are not assigned to S-CO or G-CO keys can be assigned to a flexible line key on a proprietary telephone. The assigned button serves as the O-CO key. An incoming call, on an unassigned exchange, arrives at the O-CO key. To make an outside call, you simply press the designated O-CO key.

PT

CO	*	AUTO DIAL / STORE
Press the programmable button.	Dial ✳ .	Press STORE.

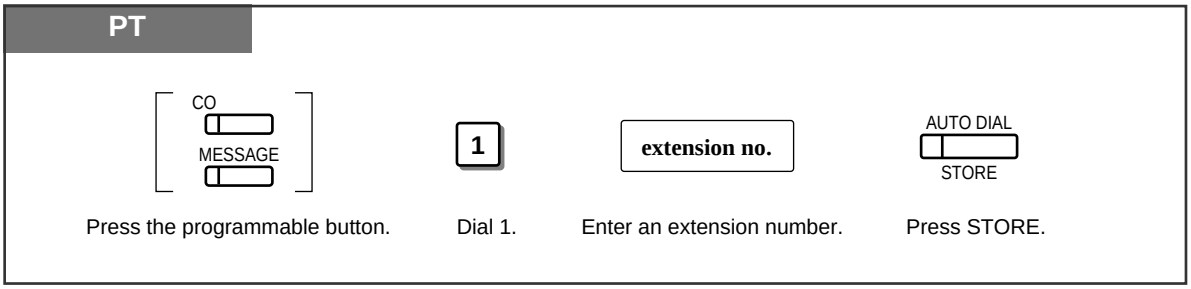
Trunk Group (G-CO) Key

To use exchange lines efficiently, a group of exchange lines (trunk group) can be assigned to a line key. This button is referred to as Trunk Group (G-CO) key. Any incoming calls from any exchange line in the trunk group arrive at the G-CO key. To make an outside call, you can access an idle exchange line in the group by simply pressing the assigned G-CO key.



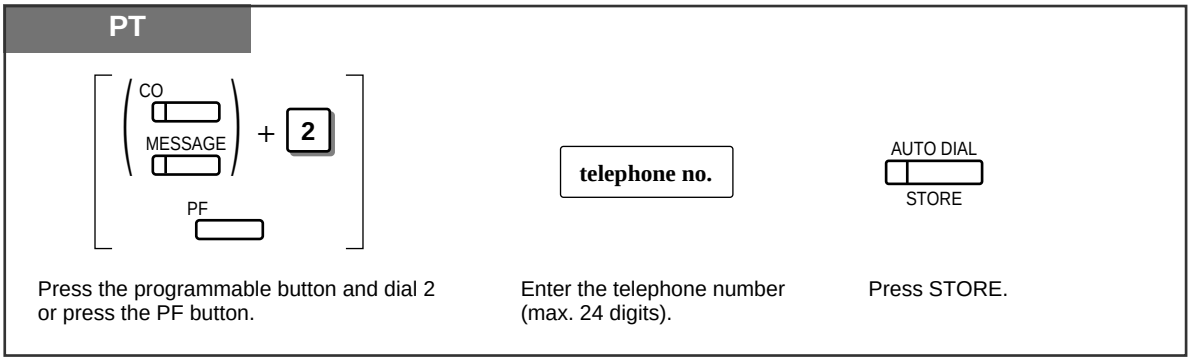
- The same line can be assigned as a S-CO key and G-CO key.
- The exchange lines for making and/or receiving calls in trunk groups must be pre-programmed.
- When your extension is assigned as the incoming call destination for an exchange line, you cannot receive any incoming exchange line calls unless a G-CO, O-CO or S-CO key associated with the line is assigned.

DSS (Direct Station Selection) Button



- 1.3 Making Calls, “Intercom Calling”

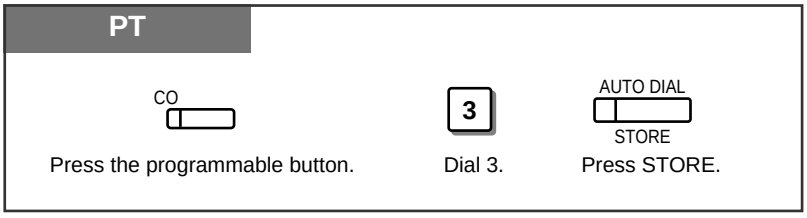
One-Touch Dialling Button



- To store the telephone number of an external party, a line access code (9, 0 or 81 through 86) must be stored as the first digit.
- You can use 0 through 9, ✳, #, PAUSE and INTERCOM (Secret) as follows.
  PAUSE: inserts a pause.
  INTERCOM: conceals all or part of a stored number.
- The number of Personal Speed Dialling numbers corresponds to the number of PF buttons assigned as One-Touch Dialling. (PF buttons are on a proprietary telephone.) You cannot assign both the One-Touch Dialling and Personal Speed Dialling features. For example, if you assign One-Touch Dialling to the PF 1 button and then Personal Speed Dialling 0, the Personal Speed Dialling 0 feature will overwrite the One-Touch assignment.

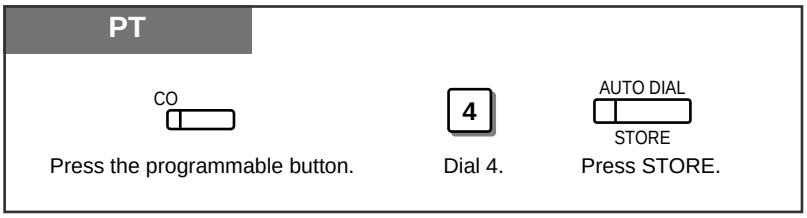
- 1.7 Useful Features, “Secret Dialling”

CONF (Conference) Button



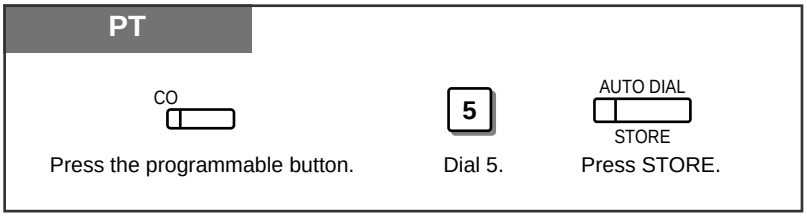
- 1.7 Useful Features, “Conference (3-party)”
- 1.7 Useful Features, “Conference, Unattended”
- 1.7 Useful Features, “Conference (5-party)”

FWD/DND (Forward/Do Not Disturb) Button



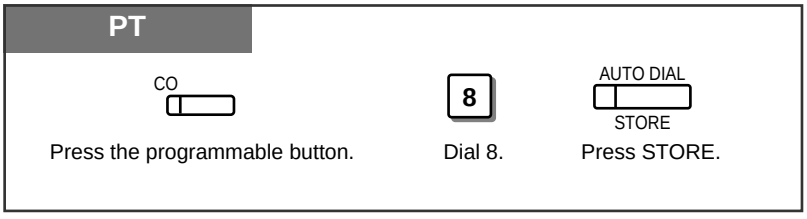
- 1.6 Before Leaving Your Desk, “Forwarding a Call (Call Forwarding)”
- 1.7 Useful Features, “Rejecting Incoming Calls (Do Not Disturb – DND)”

SAVE Button



- 1.3 Making Calls, “Redialling the Saved Number (Saved Number Redial)”

Log-In/Log-Out Button



- 1.7 Useful Features, “Joining or Leaving a Call Distribution Group (Log-In/Log-out)”
- See the Installation Manual, Section 3, “Log-In/Log-Out”.

Restoring the MESSAGE Button

Allows you to restore the message waiting feature to the MESSAGE button.

PT

Press MESSAGE. Dial 3. Press STORE.

One-Touch Access for System Features

Features that can be accessed using the dialling buttons can also be programmed into memory.

Programming

PT

Press the programmable button and dial 2 or press the PF button. Enter the desired feature number. Press STORE.

- If you want to use a programmable feature button as a button for External Feature Access, you can press the RECALL button instead of the feature number. When you press the assigned button, you can access special features (e.g. Call Waiting) offered by a host PBX or Local Exchange.

To Access

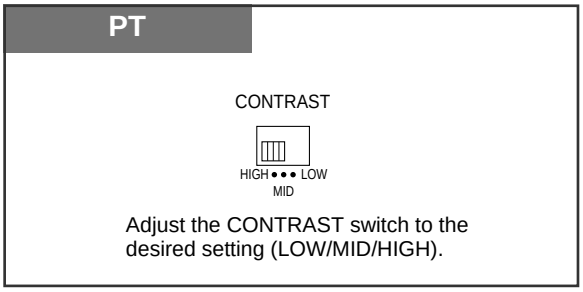
PT

Off-hook. Press the programmable button assigned above. Confirmation tone (1 beep)

- Whether the confirmation tone is heard or not depends upon the programmable feature.

Display Contrast Adjustment

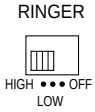
The CONTRAST selector is used to adjust the display contrast.



- This feature is available for a KX-T7130 only.

To adjust the ringer volume

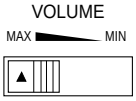
PT



Adjust the RINGER Volume lever to the desired setting (OFF/LOW/HIGH).

To adjust the speaker volume

PT



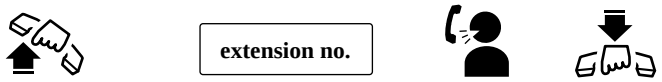
Adjust the VOLUME Control lever to the desired setting (MAX to MIN).

Intercom Calling

Allows you to make a call to another extension.

Using the handset

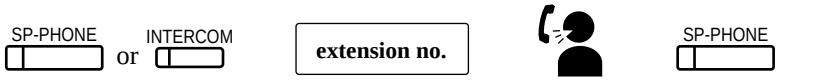
Any Telephone



Lift the handset. | Enter the extension number. | Talk. | Hang up.

Using the Speakerphone

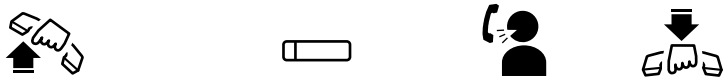
PT



Press SP-PHONE or INTERCOM. | Enter the extension number. | Talk. | Press SP-PHONE.

Using a DSS (Direct Station Selection) button

PT



Lift the handset or press SP-PHONE/MONITOR. | Press the flexible button assigned as a DSS button. | Talk. | Hang up or press SP-PHONE/MONITOR.

- After dialling an extension number, you will hear one of the following tones.
  Ringback tone: Indicates the destination extension is being called.
  Confirmation tone: Indicates you can perform voice calling (e.g. Paging).
  Busy tone: Indicates the destination extension is busy.
  Do Not Disturb (DND) tone: Indicates the destination extension has set the "Do Not Disturb (DND)" feature.

PT
- An extension number and a name, if programmed, are shown on a display PT during an intercom call.

PT
- You can assign a DSS button on a flexible button in Proprietary Telephone Settings. The stored number can be displayed in the following way.
  1. Set the MEMORY switch to "PROGRAM".
  2. Press the desired button while on-hook.

  The number will be displayed. After checking the number return the MEMORY switch to the "SET" position.

PT
- You can press a flexible button assigned as a DSS button directly to make an intercom call without going off-hook. It can be done by System Programming.

- 1.2 Proprietary Telephone Settings, "Customising the Buttons on Your Telephone", DSS (Direct Station Selection) Button
- 2.1 Tone/Ring Tone List
- See the Installation Manual, Section 3, "Intercom Calling".

Calling the Operator (Operator Call)

Allows you to call the operator within the system. One extension can be assigned as the operator.

Any Telephone

Lift the handset or press SP-PHONE/MONITOR.

0 or 9

Dial 0 or 9.

- If an operator is not assigned, this feature is not available and you will hear reorder tone.
- If the line access number is assigned to “0” by System Programming, the operator call number will be changed to “9”.

- See the Installation Manual, Section 3, “Operator Call”.

Outside Calling

Allows you to make a call to an external party using one of the following line access methods.

1.) Making Outside Calls Using Automatic Line Access
2.) Making Outside Calls Using Individual Line Access
3.) Making Outside Calls Using Trunk Group Access

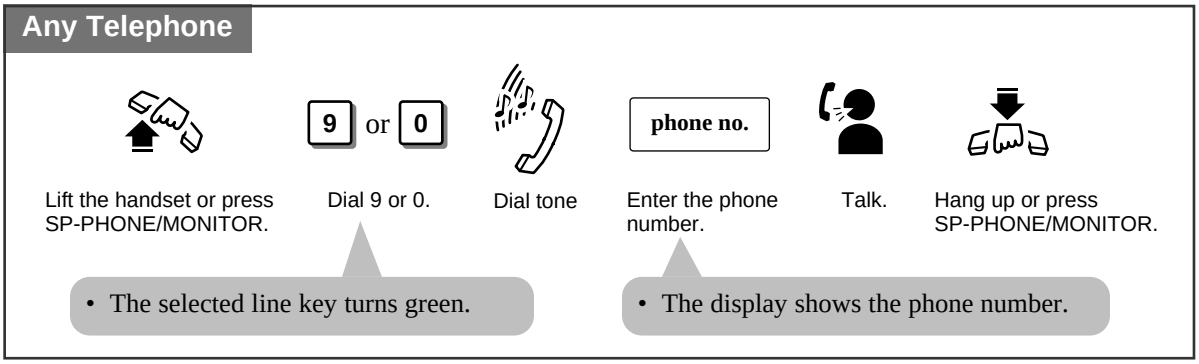
PT • An exchange line which is not assigned to a line key cannot be dialled.

PT • Helpful hints for the Handsfree (speakerphone) operation are noted in the “Handsfree Operation” feature.

- 1.2 Proprietary Telephone Settings, “Customising the Buttons on Your Telephone”, Single Exchange Line (S-CO) Key, Trunk Group (G-CO) Key
- 1.6 Before Leaving Your Desk, “Locking Your Telephone (Electronic Extension Lockout)”
- 1.7 Useful Features, “Calling with Account Codes (Account Code Entry)”
- 1.7 Useful Features, “Calling Using Your Privileges from Another Extension (Walking COS)”
- 1.8 Operator / Manager Service Features, “Remote Extension Lock”
- See the Installation Manual, Section 3, “Outside Calling”.
- See the Installation Manual, Section 3, “Call Barring Override by Account Codes”.
- See the Installation Manual, Section 3, “Call Barring — Extension Lock Boundary Class”.
- See the Installation Manual, Section 3, “Call Barring”.

Making Outside Calls Using Automatic Line Access

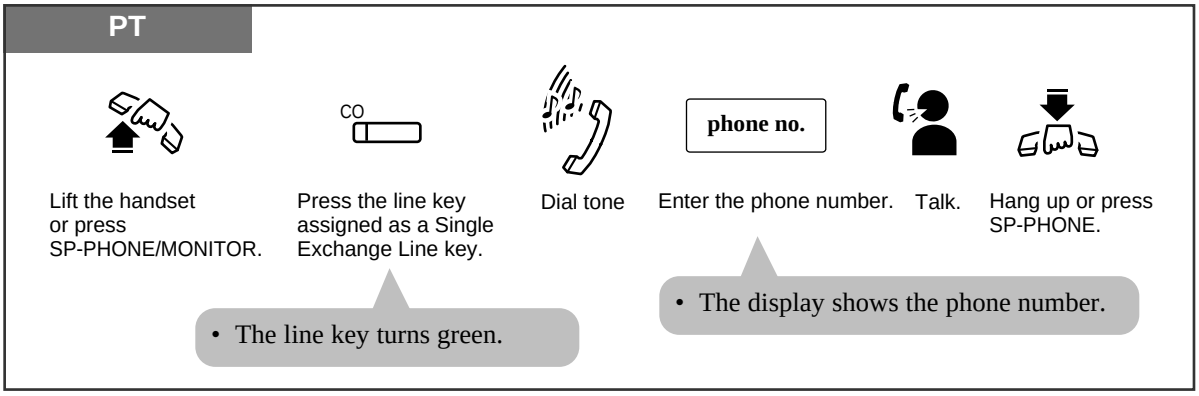
Allows you to select an available exchange line automatically.



! • If the line access number is assigned to “0” by System Programming, the operator call number will be changed to “9”.

Making Outside Calls Using Individual Line Access

Allows you to select the desired exchange line without dialling the line access code.

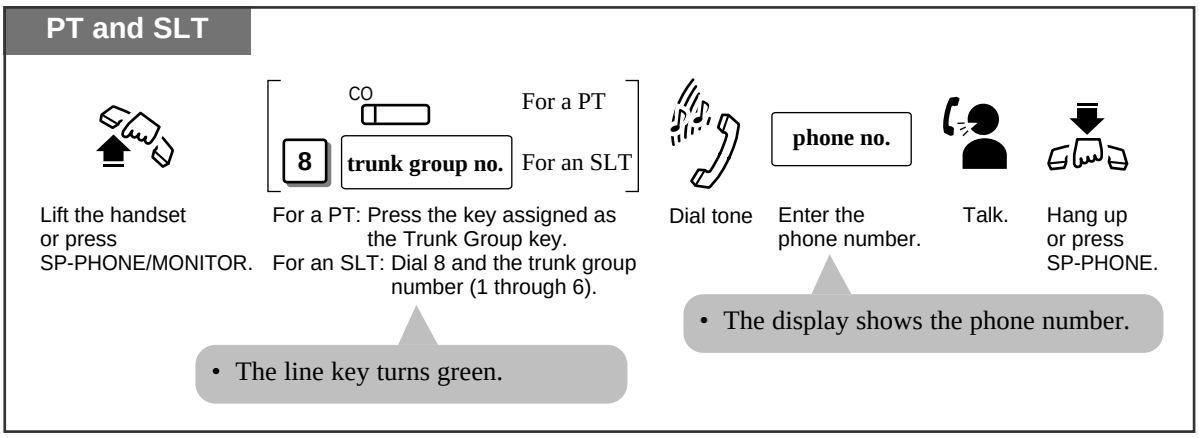

PT
CO
phone no.
Lift the handset or press SP-PHONE/MONITOR.
Press the line key assigned as a Single Exchange Line key.
Dial tone
Enter the phone number.
Talk.
Hang up or press SP-PHONE.
• The line key turns green.
• The display shows the phone number.

! PT • You may skip off-hook and press the Single Exchange Line (S-CO) key directly.

Making Outside Calls Using Individual Trunk Group Access

Allows you to select an idle line within a designated trunk group.
Through System Programming, exchange lines can be divided into 6 line groups.

PT and SLT


CO
For a PT
8
trunk group no.
For an SLT
phone no.
Lift the handset or press SP-PHONE/MONITOR.
For a PT: Press the key assigned as the Trunk Group key.
For an SLT: Dial 8 and the trunk group number (1 through 6).
Dial tone
Enter the phone number.
Talk.
Hang up or press SP-PHONE.
• The line key turns green.
• The display shows the phone number.

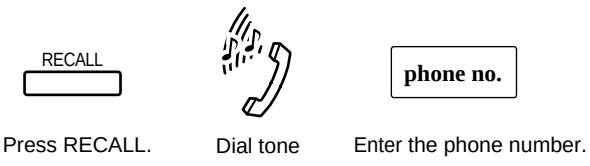
! PT • You may press the Trunk Group key directly without going off-hook.

Recall

Allows you to disconnect the current call and make another call without hanging up.

PT

While hearing any tone, dialing, or talking



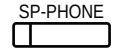
!
- System Programming may be required to perform this feature properly.
- During an outside call, the RECALL button can be used as a External Feature Access button.

- 1.7 Useful Features, “External Feature Access”
- See the Installation Manual, Section 3, “Recall”.

Handsfree Operation

Allows you to dial and to talk to the other party without lifting the handset.

PT

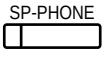


Press SP-PHONE.

- The microphone and speaker are now activated. Handsfree operation is available.

Switching from the handset to handsfree mode

PT



Press SP-PHONE.

Hang up.

- Do not replace the handset without pressing the SP-PHONE button first, or the call will be terminated.

Switching from handsfree to the handset mode

PT

Lift the handset.

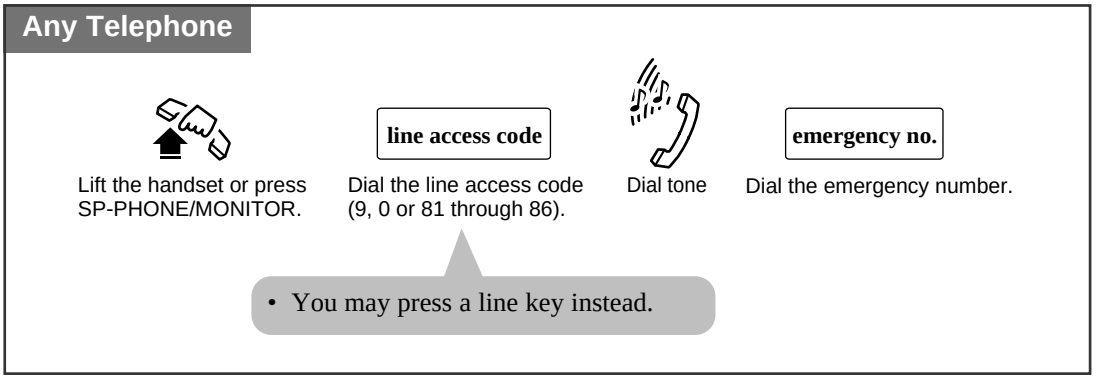
- PT • Helpful hints for the Handsfree operation:
  — Use this unit in a quiet room for best performance.
  — If you and the other party talk at the same time, parts of your conversation will be lost. To avoid this, talk alternately.
- PT • The handsfree mode is cancelled if you do not start dialling within 10 seconds.
- PT • The KX-T7050 has MONITOR button instead of a SP-PHONE button. It can be used for handsfree dialling, etc., but it cannot be used for a handsfree conversation.
- PT • You can enable the handsfree mode by pressing a line key or INTERCOM button.

• See the Installation Manual, Section 3, “Handsfree Operation”.

Making Emergency Calls (Emergency Call)

Allows you to dial a pre-set emergency number after seizing an exchange line.
Up to 5 emergency dial numbers can be stored.

Dialling


Any Telephone
Lift the handset or press SP-PHONE/MONITOR.
line access code
Dial the line access code (9, 0 or 81 through 86).
Dial tone
emergency no.
Dial the emergency number.
• You may press a line key instead.

- An emergency call is allowed even in the following cases,
  — Account Code – Verify–All mode
  — Any call barring COS number
  — Electronic Extension Lockout
- If your system is connected to a host PBX, you must dial the host PBX line access code after the line access code.

- See the Installation Manual, Section 3, “Emergency Call”.

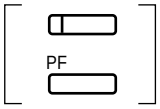
Dialling by Simply Pressing a Button (One-Touch Dialling)

Allows you to call a number or access a system feature with the touch of a button. This is done by storing an extension number, telephone number or feature number (up to 24 digits) in a One-Touch Dialling button.

Dialling

PT

Lift the handset or press SP-PHONE/MONITOR.



Press the flexible button assigned as a One-Touch Dialing button or PF button.

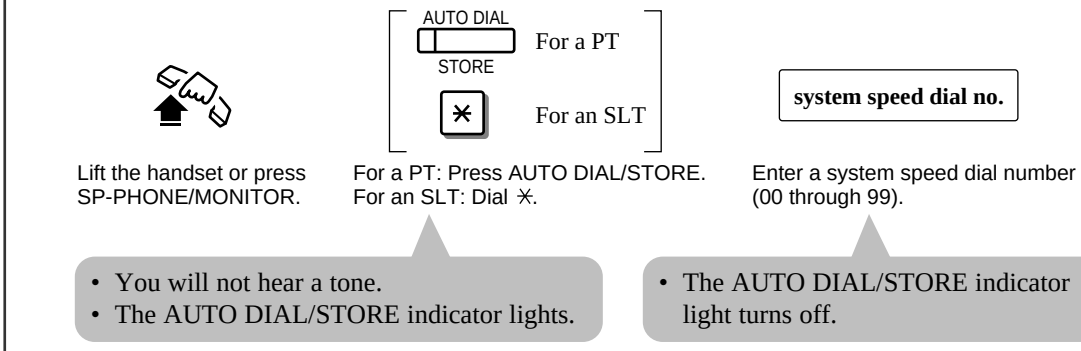
- PT • The destination numbers are stored in Proprietary Telephone Settings.
- PT • You may press a line key to select a desired exchange line before pressing the One-Touch Dialling button.
- PT • “Speed Dialling”, “One-Touch Dialling” and manual dialling can be used together.
- PT • You can store a number consisting of 25 digits or more by dividing and storing it into 2 One-Touch Dialling buttons.
- PT • A pause is automatically entered after the stored line access code, 9, 0 or 81 through 86, when dialling.
- PT • To confirm the current status of the button, press the button while on-hook.

- 1.2 Proprietary Telephone Settings, “Customising the Buttons on Your Telephone”, One-Touch Dialling Button
- See the Installation Manual, Section 3, “One-Touch Dialling”.

Dialling Using System Speed Dialling (System Speed Dialling)

Allows you to make a call using pre-programmed speed dial numbers. This system supports *100* speed dial numbers which are available to all extension users.

PT and SLT


AUTO DIAL
STORE
For a PT
For an SLT
system speed dial no.
Lift the handset or press SP-PHONE/MONITOR.
For a PT: Press AUTO DIAL/STORE.
For an SLT: Dial ✳.
Enter a system speed dial number (00 through 99).
• You will not hear a tone.
• The AUTO DIAL/STORE indicator lights.
• The AUTO DIAL/STORE indicator light turns off.

- System Speed Dial numbers must be stored by System Programming.
- "Speed Dialling", "One-Touch Dialling" and manual dialling can be used together.
- You may press a line key or dial a line access code to select a desired exchange line before pressing the AUTO DIAL/STORE button or dialling ✳.
- It is possible to cancel call barring with this feature (Call Barring Override for System Speed Dialling). In this case, System Programming is necessary.

PT
- A System Speed Dial number can be divided when stored.
  <Example>
  If the number is divided and stored in System Speed Dial numbers 01 and 02,
  Press: [AUTO DIAL/STORE] [0] [1] [AUTO DIAL/STORE] [0] [2].

PT
- The dialled number appears on the display.

SLT
- A rotary telephone cannot use this feature.

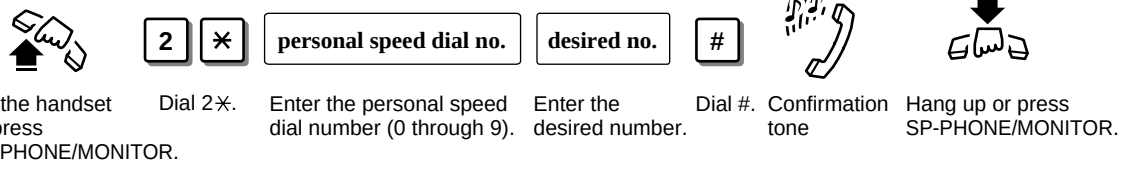
- See the Installation Manual, Section 3, "Call Barring for System Speed Dialling".
- See the Installation Manual, Section 3, "System Speed Dialling".

Dialling Using Personal Speed Dialling (Personal Speed Dialling)

Allows you to store up to 10 speed dial numbers at your extension. These numbers are available for your extension only.

Storing a phone number

Any Telephone



Lift the handset or press SP-PHONE/MONITOR. | Dial 2✳. | Enter the personal speed dial number (0 through 9). | Enter the desired number. | Dial #. | Confirmation tone | Hang up or press SP-PHONE/MONITOR.

Dialling

Any Telephone

Lift the handset or press SP-PHONE/MONITOR. | Dial #. | Enter the personal speed dial number (0 through 9).

- You may dial "1✳" instead of "#".

- An account code must be stored by pressing "✳✳" and entering the account code after the line access code.
- You can store an extension number, telephone number, or feature number of up to 24 digits. Valid digits are "0 through 9".
- A pause can be stored by pressing the ✳ key. However, in the account code verify-all, verify-toll (call barring) and forced modes, "✳" is not regarded as a pause.
- To store the telephone number of an external party, a line access code (9, 0 or 81 through 86) must be stored as the first digit.

PT
- The number of Personal Speed Dialling numbers corresponds to the number of PF buttons assigned as One-Touch Dialling. (PF buttons are on a proprietary telephone.) You cannot assign both the One-Touch Dialling and Personal Speed Dialling features. For example, if you assign One-Touch Dialling to the PF 1 button and then Personal Speed Dialling 0, the Personal Speed Dialling 0 feature will overwrite the One-Touch assignment.

SLT
- A rotary telephone cannot use this feature.

- 1.2 Proprietary Telephone Settings, "Customising the Button on Your Telephone", One-Touch Dialling Button
- See the Installation Manual, Section 3, "Personal Speed Dialling".

Checking the stored personal speed dialling numbers

PT

Lift the handset or press SP-PHONE/MONITOR.

3 ✳

Dial 3✳.

personal speed dial no.

Enter the personal speed dial number (0 through 9).

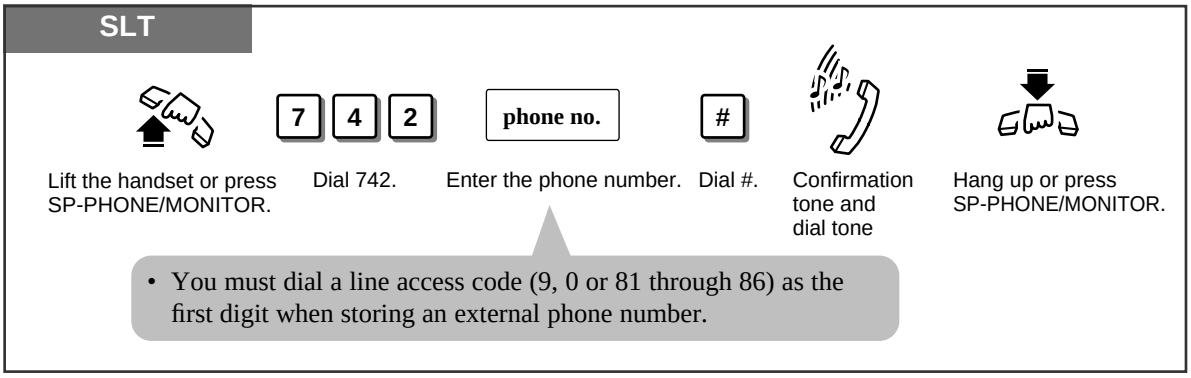
#

Dial #.

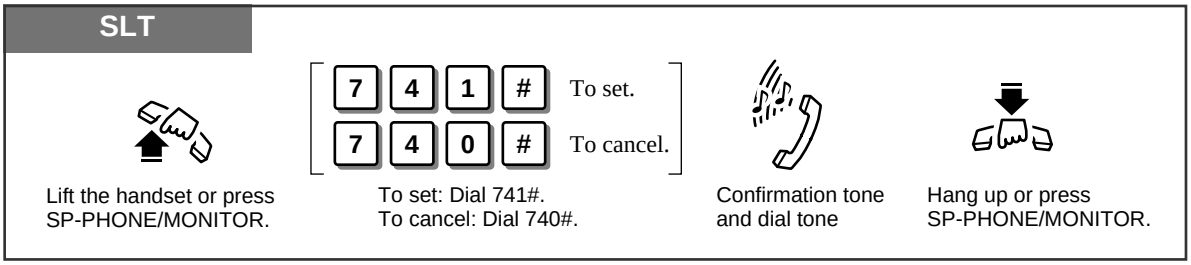
Dialling by Simply Going Off-Hook (Pickup Dialling)

Allows you to make an outgoing call by just going off-hook (single line telephone only).

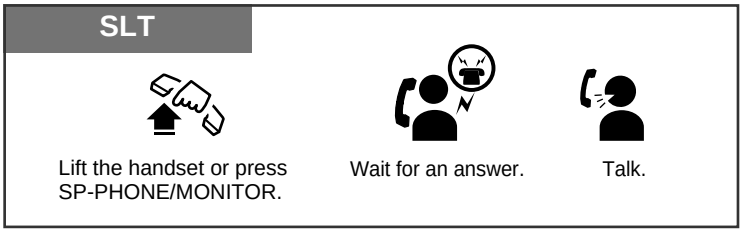
Storing a phone number


SLT
7 4 2
phone no.
#
Lift the handset or press SP-PHONE/MONITOR.
Dial 742.
Enter the phone number.
Dial #.
Confirmation tone and dial tone
Hang up or press SP-PHONE/MONITOR.
• You must dial a line access code (9, 0 or 81 through 86) as the first digit when storing an external phone number.

Setting / Cancelling


SLT
7 4 1 # To set.
7 4 0 # To cancel.
Lift the handset or press SP-PHONE/MONITOR.
To set: Dial 741#.
To cancel: Dial 740#.
Confirmation tone and dial tone
Hang up or press SP-PHONE/MONITOR.

Dialling

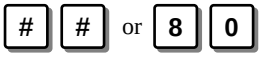


- This feature will not work if you answer an incoming call or retrieve a call on hold.
- Up to 32 digits, consisting of "0 through 9" and "✳", can be stored. The "✳" button is used as a PAUSE. However, in the account code verify-all, verify-toll (call barring) and forced modes, "✳" is not regarded as a pause.
- An account code must be stored by pressing "✳✳" and entering the account code after the line access code.
- During the waiting time after going off-hook, you can call another party and override this feature. You can change the waiting time between going off-hook and automatically dialling through System Programming.
- A rotary telephone cannot use this feature.

- See the Installation Manual, Section 3, "Pickup Dialling".

Redialling the Last Number Dialled (Last Number Redial)

Automatically saves the last outside phone number dialled so that you can make a call to the same party later using a simple operation.

PT		SLT	
			
Lift the handset or press SP-PHONE/MONITOR.	Press REDIAL.	Lift the handset.	Dial ## or 80.

- Up to 64 digits can be stored and redialled. This does not include an exchange line access code.
- If you hear a busy tone when attempting to redial, select another line and press the REDIAL button or feature number.

PT
- "✳", "#", "PAUSE", and "INTERCOM" (for secret dialling) are counted as 1 digit.

PT
- While calling or during a conversation, pressing the REDIAL button will disconnect the current call and redial the stored number.

PT
- You can check the stored number. Press the REDIAL button while on-hook, and the stored number will be displayed.

- See the Installation Manual, Section 3, "Redial".

Redialling the Saved Number (Saved Number Redial)

Allows you to save the current external telephone number during a conversation, so that you can redial the same party later using a simple operation. The saved number can be redialled until another number is stored.

Storing

PT

During a conversation or while hearing a busy tone

Press AUTO DIAL/STORE.

Press SAVE.

Dialling

PT

Lift the handset or press SP-PHONE/MONITOR.

Press SAVE.

! PT • Up to 64 digits can be stored and redialled. This does not include an exchange line access code.

PT • "✳", "#", "PAUSE", and "INTERCOM" (for secret dialling) are counted as 1 digit.

PT • A flexible button can be assigned as the SAVE button.

PT • You can check the stored number. Press the SAVE button while on-hook, and the stored number will be displayed.

PT • You can change the exchange line when dialling. You may press a line key to select an exchange line directly after going off-hook before pressing the SAVE button.

- 1.2 Proprietary Telephone Settings, "Customising the Buttons on Your Telephone", SAVE Button
- See the Installation Manual, Section 3, "Redial".

Sending a Call Waiting Tone to a Busy Extension (Busy Extension Signalling)

The busy extension that you called will hear the assigned Call Waiting tone and know that you are waiting.

Any Telephone

If you make an intercom call and hear a busy tone

2 Dial 2.	Wait for an answer and talk.

- To answer from the calling extension, see “Call Waiting” in this manual.
- If you hear a reorder tone when you set this feature, the called party has not permitted call waiting to be used. This feature is only available if the called extension has set the “Call Waiting” feature.

- 1.5 During a Conversation, “Call Waiting”
- See the Installation Manual, Section 3, “Busy Extension Signalling”.

Making Your Telephone Ring Back Automatically When a Line Becomes Free (Automatic Callback Busy – Camp-On)

Allows you to receive callback ringing when the dialled line becomes idle. When you answer the callback ringing;
For an extension: The called extension starts ringing without dialling.
For an exchange line: The line is seized.

Setting

Any Telephone

If you hear a busy tone

Dial 6.

Confirmation tone and reorder tone

Hang up or press SP-PHONE/MONITOR.

Wait for the Camp-On recall.

Answering an intercom recall

Any Telephone

If you hear the telephone ringing

Lift the handset or press SP-PHONE/MONITOR.

- You hear a ringback tone and the called extension rings automatically.

Answering an exchange line recall

Any Telephone

If you hear the telephone ringing

Lift the handset or press SP-PHONE/MONITOR .

Dial tone

phone no.

Enter the phone number.

Cancelling

Any Telephone

Lift the handset or press SP-PHONE/MONITOR.

- If you do not answer within 4 callback ring signals (within 10 seconds), this feature will be cancelled.

- See the Installation Manual, Section 3, “Automatic Callback Busy (Camp-On)”.

Interrupting an Existing Call (Executive Busy Override)

Executive Busy Override — Extension

Allows you to connect to an existing intercom (extension) call.
System Programming is required to use this feature.

Any Telephone

If you make an intercom call and while hearing a busy tone

Dial 3.

Confirmation tone (optional)

A three-party conference is now established.

To leave the conference

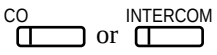
Any Telephone

Hang up or press SP-PHONE.

The other two parties continue their conversation.

To terminate one party and talk to the other

PT



Press the line key or INTERCOM to which you wish to remain connected.

Confirmation tone (optional)

- If all three parties are extensions, this operation is not possible.

!

- This feature does not work when “Data Line Security” or “Executive Busy Override Deny” is set at either or both of the other parties.
- When a 2-party call is changed to a 3-party call or vice versa, a confirmation tone is sent to all parties. The tone can be disabled.

- 1.3 Making Calls, ‘Denying “Interrupting an Existing Call”(Executive Busy Override Deny)’
- 1.7 Useful Features, “Conference (3-party)”
- 1.7 Useful Features, “Data Line Security”
- See the Installation Manual, Section 3, “Executive Busy Override”.

Executive Busy Override — Exchange Line

Allows you to connect to an existing outside call or add a third party to your existing conversation.
System Programming is required to use this feature.

PT

Lift the handset or press SP-PHONE/MONITOR.

Press the desired line key whose indicator is lit red.

Confirmation tone (optional)

A three-party conference is now established.

To leave the conference

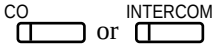
PT

Hang up or press SP-PHONE/MONITOR.

The other two parties continue their conversation.

To terminate one party and talk to the other

PT



Press the line key or INTERCOM to which you wish to remain connected.

Confirmation tone (optional)

! PT • This feature does not work when “Data Line Security” or “Executive Busy Override Deny” is set at the extension engaged in the existing outside call.

PT • When a 2-party call is changed to a 3-party call or vice versa, a confirmation tone is sent to all parties. Removing the tone is possible through programming.

- 1.3 Making Calls, ‘Denying “Interrupting an Existing Call” (Executive Busy Override Deny)
- 1.7 Useful Features, “Conference (3-party)”
- 1.7 Useful Features, “Data Line Security”
- See the Installation Manual, Section 3, “Executive Busy Override”.

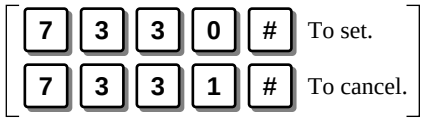
Denying "Interrupting an Existing Call" (Executive Busy Override Deny)

Allows you to prevent other extension users from interrupting your conversation.

Setting / Cancelling

Any Telephone

Lift the handset or press SP-PHONE/MONITOR.



To set: Dial 7330#.
To cancel: Dial 7331#.

Confirmation tone

Hang up or press SP-PHONE/MONITOR.

- Single line telephone users can dial "0" instead of "#".

- 1.3 Making Calls, "Interrupting an Existing Call (Executive Busy Override)", Executive Busy Override — Extension, Executive Busy Override — Exchange Line
- See the Installation Manual, Section 3, "Executive Busy Override".

Receiving Calls

PT and SLT	PT
Lift the handset or press SP-PHONE.	CO or INTERCOM Press a rapidly flashing line key or INTERCOM. • The line key or INTERCOM indicator light turns steady green.

! PT • There are 3 types of Line Preference for incoming outside calls (— No Line/Prime Exchange Line/Ringing Line). Each preference can be selected by Proprietary Telephone Settings.

PT • When receiving an incoming call, you may press the line key or INTERCOM button which is rapidly flashing red and talk (Handsfree mode).

PT • Helpful hints for the handsfree operation are noted in the “Handsfree Operation” feature.

- 1.2 Proprietary Telephone Settings, “Customising Your Telephone Functions”, Preferred Line Assignment — Incoming
- 1.3 Making Calls, “Handsfree Operation”
- See the Installation Manual, Section 3, “Receiving Calls”.

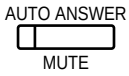
Handsfree Answerback

Allows you to answer an intercom call without lifting the handset.

Setting

PT

When the SP-PHONE and the AUTO ANSWER/MUTE indicators are off



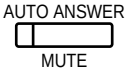
Press AUTO ANSWER/MUTE.

- The AUTO ANSWER/MUTE indicator turns on.

Cancelling

PT

When the AUTO ANSWER/MUTE indicator is on



Press AUTO ANSWER/MUTE.

- The AUTO ANSWER/MUTE indicator light turns off.

! PT • This feature does not work for incoming outside calls or doorphone calls.
PT • When an outside call is transferred to your extension, this feature is overridden and a ring tone is heard.

- 1.2 Proprietary Telephone Settings, “Customising Your Telephone Functions”, Intercom Alert Assignment
- 1.7 Useful Features, “Room Monitor”
- See the Installation Manual, Section 3, “Handsfree Answerback”.

Picking up a Call Ringing at Another Extension (Call Pickup)

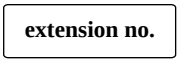
Directed Call Pickup

Allows you to answer an incoming call ringing at any other extension.

Any telephone

Lift the handset or press SP-PHONE/MONITOR.

Dial 4.



Enter the extension number where the call is ringing.

Confirmation tone (optional)

Talk.

- Doorphone calls can be picked up by extensions that are not programmed to answer doorphone calls.
- You hear a confirmation tone when the call is picked up. The tone can be disabled.
- If a ringing extension sets the Call Pickup Deny feature, you will hear a reorder tone.

- 1.4 Receiving Calls, “Picking up a Call Ringing at Another Extension (Call Pickup)”, Denying/allowing your calls to be picked up (Call Pickup Deny)
- See the Installation Manual, Section 3, “Call Pickup”.

Group Call Pickup

Allows you to answer a call that is ringing at another telephone within your extension group.

Any telephone

Lift the handset or press SP-PHONE/MONITOR.

Dial 40.

Confirmation tone (optional)

Talk.

- You can pick up an incoming outside, intercom or doorphone call, but you cannot pickup a Camp-On recall or hold recall.
- You will hear a confirmation tone when the call is picked up. The tone can be disabled.
- If a ringing extension sets the Call Pickup Deny feature, you will hear reorder tone.
- You can pick up a call just by going off-hook even though your extension is not ringing. It can be done by System Programming.

- 1.4 Receiving Calls, “Picking up a Call Ringing at Another Extension (Call Pickup)”, Denying/allowing your calls to be picked up (Call Pickup Deny)
- See the Installation Manual, Section 3, “Extension Group”.
- See the Installation Manual, Section 3, “Call Pickup”.

Retrieving Calls Answered by a TAM (Telephone Answering Machine)

Allows you to answer an incoming call received by a TAM.
System Programming is required to use this feature.

Any telephone

While the TAM is answering a call

Lift the handset or press SP-PHONE/MONITOR.

TAM no.

Enter the TAM number.

Busy tone

4

Dial 4.

Talk.

- When you try to pick up a call and hear a reorder tone, the TAM is not answering a call or the dialled extension is not the TAM extension.
- A TAM number is the 3-digit extension number of the TAM.

- See the Installation Manual, Section 3, “Call Pickup”.

Denying/allowing your calls to be picked up (Call Pickup Deny)

Allows you to prevent another extension from picking up your calls using the “Call Pickup” feature.

Setting / Cancelling

Any Telephone

Lift the handset or press SP-PHONE/MONITOR.

7 2 1 # To set.
7 2 0 # To cancel.

To set: Dial 721#.
To cancel: Dial 720#.

Confirmation tone and dial tone

Hang up or press SP-PHONE/MONITOR.

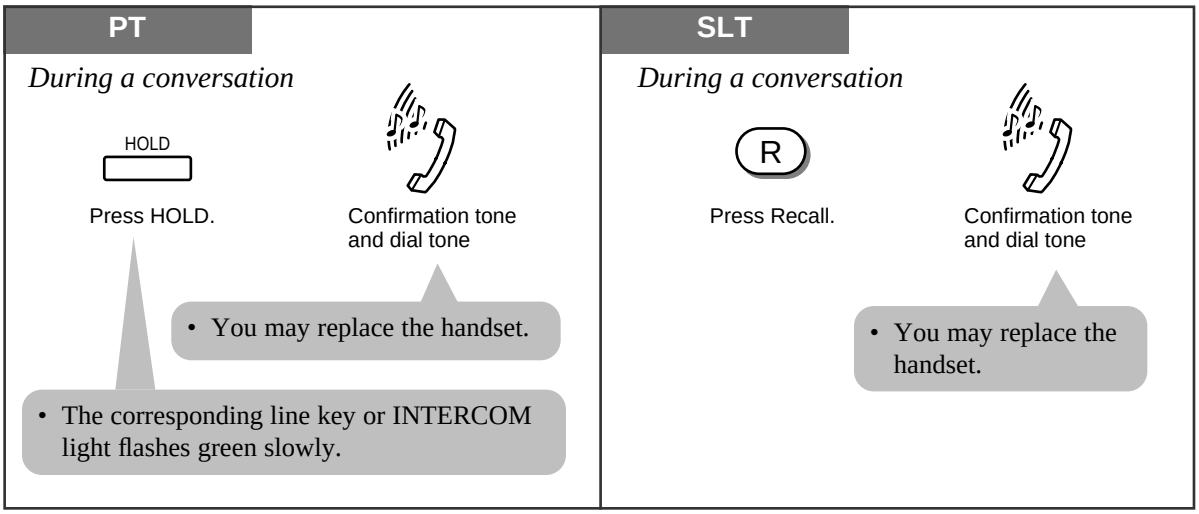
- Single line telephone users can dial “0” instead of “#”.

- 1.4 Receiving Calls, “Picking up a Call Ringing at Another Extension (Call Pickup)”, Directed Call Pickup
- 1.4 Receiving Calls, “Picking up a Call Ringing at Another Extension (Call Pickup)”, Group Call Pickup
- See the Installation Manual, Section 3, “Call Pickup”.

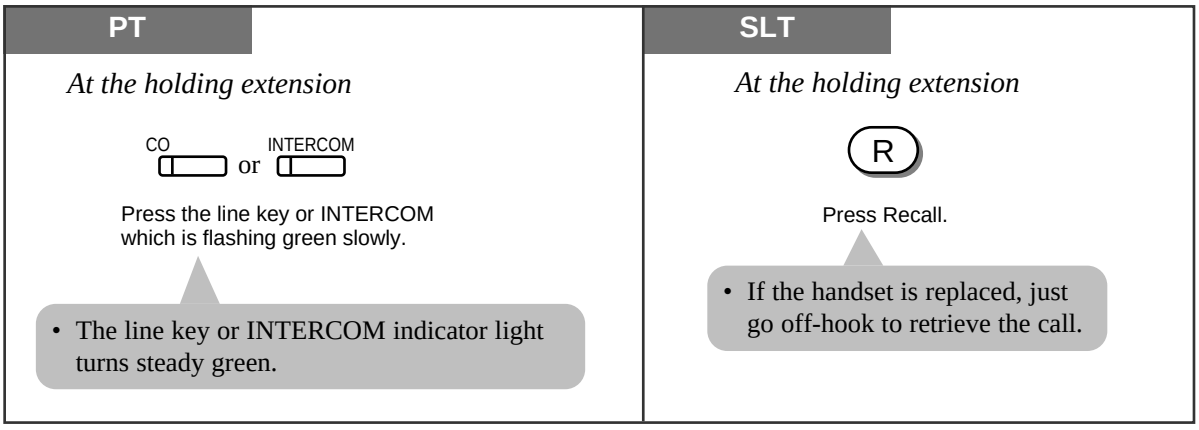
Placing a Call on Hold (Call Hold)

Allows you to place a call on hold.

Placing a call on hold



Retrieving a call on hold


PT
At the holding extension
CO
or
INTERCOM
Press the line key or INTERCOM which is flashing green slowly.
• The line key or INTERCOM indicator light turns steady green.
SLT
At the holding extension
R
Press Recall.
• If the handset is replaced, just go off-hook to retrieve the call.

- To retrieve a call on hold at another extension, refer to “Retrieving a Call on Hold (Call Hold Retrieve)”.
- If a held call is not retrieved within a pre-determined time (default: 30 seconds), ringing or an alarm tone will be heard (Hold Recall/Hold Alarm). If the hold recall time is set to “Disable”, the call will not recall.
- If a held outside call is not answered within 30 minutes, it will be automatically disconnected.
- When going off-hook:
  — Before recalling: A dial tone will be heard while the call is on hold. You may dial another telephone number.
  — While recalling: Only the first call on hold will be answered.
- You cannot hold a doorphone call.

PT • During a 5-party conference, you cannot use this feature.

PT • With outside calls, you can put multiple calls on hold. However, with intercom calls, you can put only one call on hold. One way around this is to use the Call Park feature. See two pages ahead.

PT • If a call is placed on hold for more than the programmed time, ringing or an alarm tone will be heard (Hold Alarm/Hold Recall) and the LCD will flash the following display.
Example:
— When holding extension 211, Mr. Brown: "211: Brown" will flash.
— When holding exchange line, CO 1: "Call on CO 1" will flash.

SLT • If "Hold-2" or "Hold-3" is assigned by System Programming, you must dial "50" after pressing the Recall button.

SLT • Only an outside or intercom call can be placed on hold at any one time. If you want to hold both calls, use the Call Park feature.

- 1.5 During a Conversation, "Retrieving a Call on Hold (Call Hold Retrieve)"
- 1.5 During a Conversation, "Placing a Call in System Parking Area (Call Park)"
- 1.7 Useful Features, "Conference (5-party)"
- See the Installation Manual, Section 3, "Hold".

Placing a Call on Hold Exclusively (Exclusive Hold)

Prevents other extension users from retrieving your held call. Only the user who held the call can retrieve it.

Placing a call on exclusive hold

PT

During a conversation

HOLD — Press HOLD.

HOLD — Press HOLD again.

- The line key or INTERCOM light flashes green moderately.
- The current call is placed on exclusive hold.

- The line key or INTERCOM light flashes green slowly.
- The current call is placed on hold.

Retrieving a call on exclusive hold

PT

CO or INTERCOM

Press the line key or INTERCOM which is on exclusive hold.

- The line key or INTERCOM light turns steady green.
- The held call is released.

- PT • During a 5-party conference, you cannot use this feature.
- PT • If a held call is not retrieved within a pre-determined time (default: 30 seconds), ringing will be heard (Hold Recall).
- PT • If an outside call is placed on hold and not retrieved within 30 minutes, it will be automatically disconnected.
- PT • With outside calls, you can put multiple calls on exclusive hold. However, with intercom calls, you can put only one call on exclusive hold.

- 1.5 During a Conversation, “Placing a Call on Hold (Call Hold)”
- 1.7 Useful Features, “Conference (5-party)”
- See the Installation Manual, Section 3, “Hold”.

Retrieving a Call on Hold (Call Hold Retrieve)

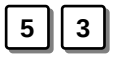
Allows you to retrieve a call that has been placed on hold by another extension.

Retrieving an outside call on hold

PT and SLT

At the other extension

Lift the handset or press SP-PHONE/MONITOR.



Dial 53.

exchange line no.

Enter the held exchange line number (1 through 6).

Confirmation tone

PT

At the other extension

Press the line key whose indicator is flashing red slowly.

- The line key light turns steady green.

Retrieving an intercom call on hold

PT and SLT

At the other extension

Lift the handset or press SP-PHONE/MONITOR.

Dial 5.

extension no.

Enter the holding extension number.

Confirmation tone

- Calls held in “Call Park” or “Exclusive Hold” cannot be retrieved by this feature.
- You can hear a confirmation tone when the call is retrieved by entering the feature number.

- 1.5 During a Conversation, “Placing a Call on Hold (Call Hold)”
- See the Installation Manual, Section 3, “Hold”.

Placing a Call in System Parking Area (Call Park)

Allows you to place a held call into a system parking area so that you can perform other tasks. The parked call can be retrieved by any extension user. Up to 10 calls can be parked.

PT and SLT

During a conversation

For a PT: Press HOLD.
For an SLT: Press Recall.

Confirmation tone and dial tone

Dial 36.

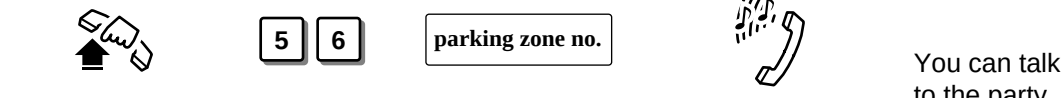
Enter a parking zone number (0 through 9).

Confirmation tone and dial tone

- **If you hear a busy tone,** it indicates the specified parking zone is unavailable.
- You do not need to redial the feature number to change the parking zone. Just enter the parking zone number while hearing the busy tone.

Retrieving a parked call

PT and SLT



Lift the handset or press SP-PHONE/MONITOR.

Dial 56.

Enter a parking zone number (0 through 9) where the call is to be parked.

Confirmation tone and dial tone

You can talk to the party.

- **If there is no held call,** you will hear a reorder tone.

- If a parked call is not retrieved within a pre-determined time (default: 30 seconds), ringing will be heard (Hold Recall).
- If a parked call is not retrieved within 30 minutes, it will be automatically disconnected.
- This feature is useful when you want to hold more than one intercom call with a PT, or more than one intercom or outside call with an SLT.
- PT During a 5-party conference, you cannot use this feature.

- 1.7 Useful Features, “Conference (5-party)”
- See the Installation Manual, Section 3, “Call Park”.

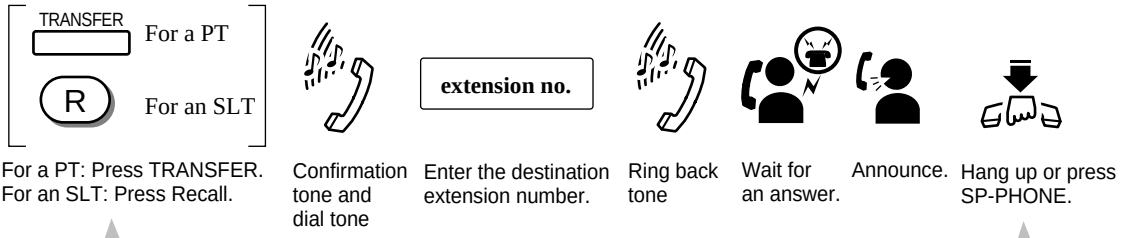
Transferring a Call to an Extension (Call Transfer – to Extension)

Allows you to transfer a received call to another extension. There are 2 ways.
Screened Call Transfer: The call is announced before being transferred.
Unscreened Call Transfer: The line is transferred without waiting for an answer.

Screened Call Transfer

PT and SLT

During a conversation

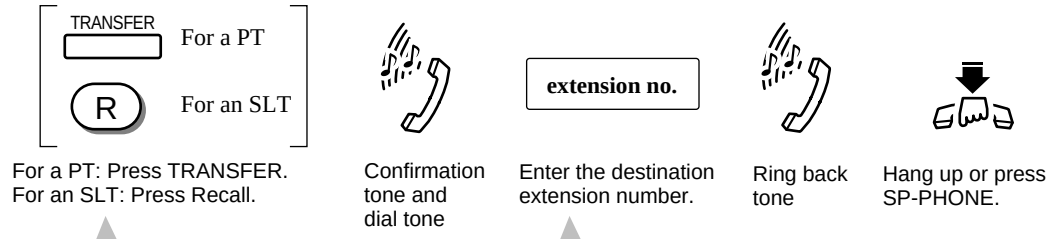


- The other party is placed on hold.
- The call is transferred.

Unscreened Call Transfer

PT and SLT

During a conversation



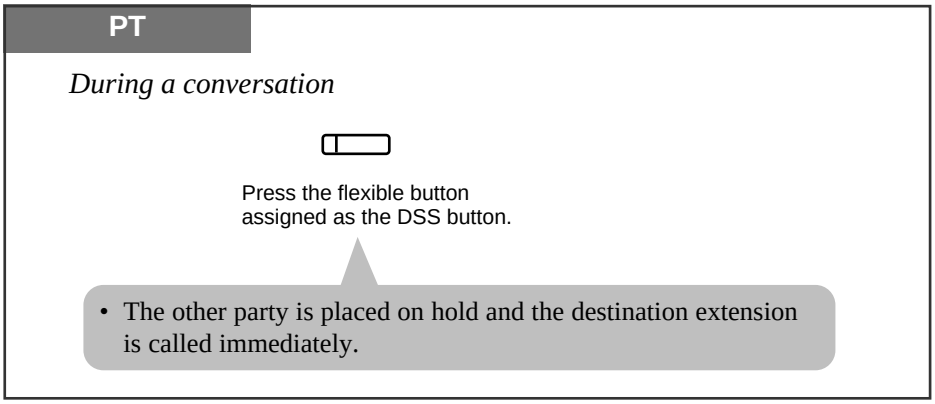
- The other party is placed on hold.
- Ringing starts at the destination extension.

Call Transfer using a DSS button

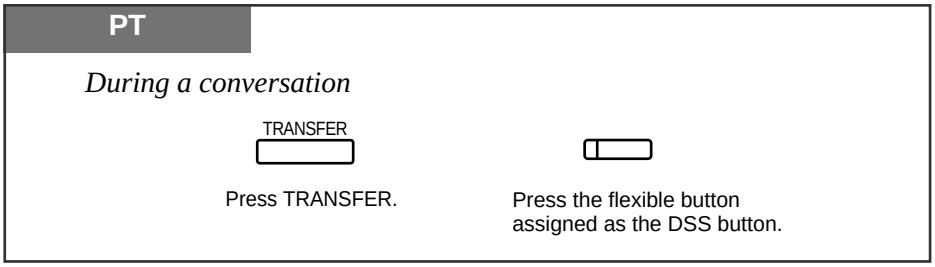
Allows you to perform a Screened or Unscreened Call Transfer by using a DSS button. There are 2 operations, depending on whether or not One-Touch Transfer* is set.

* **One-Touch Transfer** allows you to hold an outside call and transfer it to an extension by pressing one key. This feature provides automatic hold and transfer, without pressing the TRANSFER button. System Programming is required to use this function.

"With Transfer" mode


PT
During a conversation
Press the flexible button assigned as the DSS button.
• The other party is placed on hold and the destination extension is called immediately.

"Without Transfer" mode



- If the destination extension does not answer the call within a pre-determined time (default: 30 seconds), the call will return to you (Transfer Recall).
- If there is no answer within 30 minutes after "Transfer Recall" starts, the call will be disconnected.
- When the dialled extension is busy, you may access the extension by dialling "2" (Busy Extension Signalling) or "3" (Executive Busy Override) and going on-hook.

PT
- If you want to return to the held call, press the TRANSFER button or corresponding line key or INTERCOM button before the destination extension answers.

PT
- A flexible line key can be assigned as a DSS button.

PT
- To use "One-Touch Transfer", System Programming is required.

PT
- During a 5-party conference, you cannot transfer a call.

SLT
- If you want to return to the held call, press the Recall button before the destination extension answers.

SLT
- If "Hold-3" is assigned in System Programming, you must dial "50" after pressing the Recall button.

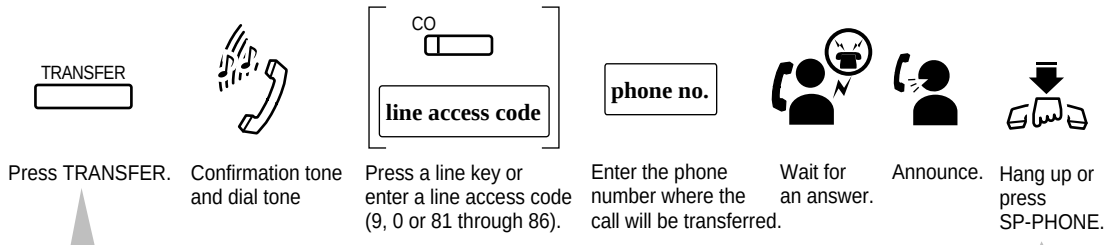
- 1.2 Proprietary Telephone Settings, "Customising the Buttons on Your Telephone", DSS (Direct Station Selection) Button
- See the Installation Manual, Section 3, "Call Transfer – to Extension".

Transferring a Call to an Exchange Line (Call Transfer – to Exchange Line)

Allows you to transfer a received intercom call to an external party.
System Programming is required to execute this feature.

PT

During a conversation



Press TRANSFER. Confirmation tone and dial tone. Press a line key or enter a line access code (9, 0 or 81 through 86). Enter the phone number where the call will be transferred. Wait for an answer. Announce. Hang up or press SP-PHONE.

- The current call is placed on hold.
- The call is transferred.

! PT • If you want to return to the held call, press the TRANSFER button or INTERCOM button before the destination party answers.

PT • If you want to join the conversation after transferring the call, press the corresponding line key. A conference call is established.

PT • To change the party where the call is transferred before hanging-up, press the line key whose indicator is flashing slowly to retrieve the call, then repeat the Call Transfer procedure.

• See the Installation Manual, Section 3, “Call Transfer – to Exchange Line”.

Call Waiting

During a conversation, a Call Waiting tone informs you that there is a call waiting. You can answer the second call by disconnecting the first call or placing it on hold.

Setting / Cancelling for outside calls

Any Telephone

Lift the handset or press SP-PHONE/MONITOR.

7 3 1 1 # To set.
7 3 1 0 # To cancel.

To set: Dial 7311#.
To cancel: Dial 7310#.

Confirmation tone and dial tone

Hang up or press SP-PHONE/MONITOR.

- Single line telephone users can dial “0” instead of “#”.

Setting / Cancelling for intercom calls

Any Telephone

Lift the handset or press SP-PHONE/MONITOR.

7 3 2 1 # To set.
7 3 2 0 # To cancel.

To set: Dial 7321#.
To cancel: Dial 7320#.

Confirmation tone and dial tone

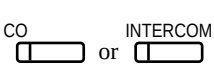
Hang up or press SP-PHONE/MONITOR.

- Single line telephone users can dial “0” instead of “#”.

To talk to the new caller by terminating the current call

PT

While hearing a Call Waiting tone



Press the flashing line key or INTERCOM.

Talk to the new caller.

- The current call is disconnected.

SLT

While hearing a Call Waiting tone

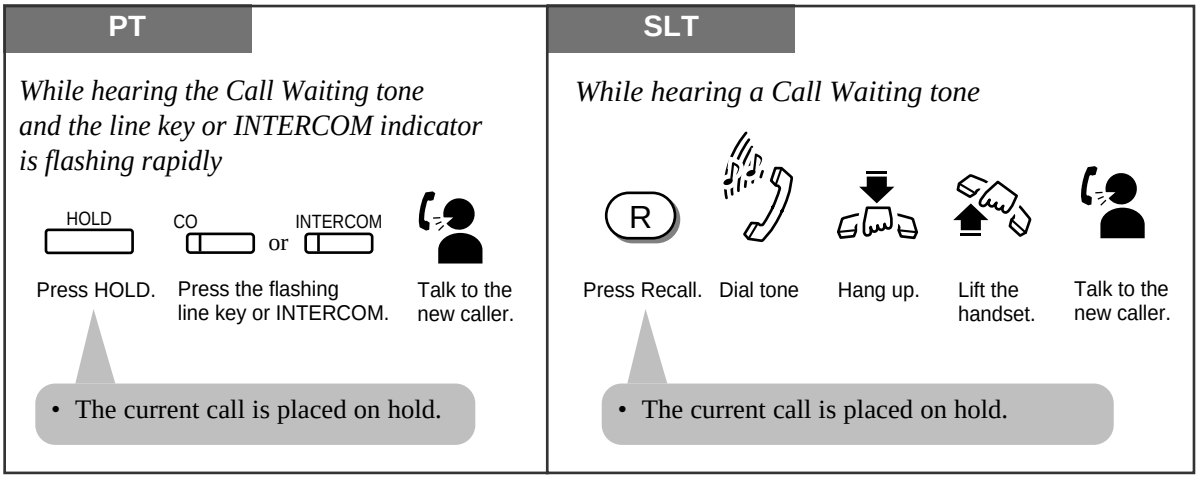
Hang up.

Lift the handset.

Talk to the new caller.

- The current call is disconnected.

To talk to the new party holding the current call



— If both the current call and new call are extension calls, you do not have to press the INTERCOM button.

- The default is “OFF”.
- When Call Waiting is enabled, a Call Waiting tone is sent to the user under the following conditions.
  1) When an outside call (except a doorphone call) is received, or
  2) When another extension executes the “Busy Extension Signalling ” feature.
- Setting “Data Line Security” temporarily cancels this feature.
- You can change the desired Call Waiting tone (Tone 1 or Tone 2).

PT
- If a Call Waiting tone is heard and the line key or INTERCOM indicator does not flash, this tone indicates Call Waiting from the Local Exchange. In this case, see “External Feature Access”.

SLT
- If “Hold-2” or “Hold-3” is assigned in System Programming, you must dial “50” after pressing the Recall button.

SLT
- You cannot transfer the new call while holding the current call. If you want to do so, first park the original call using the Call Park feature, hang up, then take the new call.

- 1.2 Proprietary Telephone Settings, “Customising Your Telephone Functions”, Call Waiting Tone Selection
- 1.3 Making Calls, “Sending a Call Waiting Tone to a Busy Extension (Busy Extension Signalling)”
- 1.5 During a Conversation, “Placing a Call in System Parking Area (Call Park)”
- 1.7 Useful Features, “Data Line Security”
- 1.7 Useful Features, “External Feature Access”
- See the Installation Manual, Section 3, “Call Waiting”.

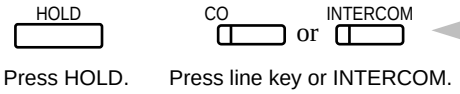
Call Splitting

Allows you to talk to two different parties alternately. If a call is received while you are already on the line, you can place the current call on hold and have a conversation with the other party.

Having a conversation while another call is on (exclusive) hold

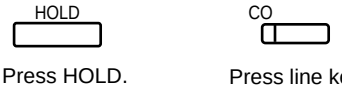
PT

Between one extension and one outside line



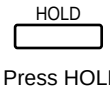
- Repeating these operations (steps 1 and 2) alternates between the callers.

Between two outside lines



- Repeating these operations (steps 1 and 2) alternates between the callers.

Between two extensions



- Pressing the HOLD button alternates between the callers.

SLT

- The first held call is released.
- Pressing this button alternates between the callers.

- This feature does not work during a doorphone call or paging.
- PT During a 5-party conference, you cannot use this feature.

- 1.5 During a Conversation, “Placing a Call on Hold (Call Hold)”
- 1.5 During a Conversation, “Placing a Call on Hold Exclusively (Exclusive Hold)”
- See the Installation Manual, Section 3, “Call Splitting”.

Paging

Allows you to make a voice announcement to several people at the same time. Your message is announced over built-in speakers of proprietary telephones and/or the external pager. The paged person can answer your page from any telephone. You can also transfer a call after paging.

All extensions

Allows you to make a voice announcement to all extensions.

Any Telephone

Lift the handset or press SP-PHONE/MONITOR. | Dial 330. | Confirmation tone | Announce. | Wait for an answer. | Talk.

Group

Allows you to select an extension group and make a voice announcement. The announcement can only be heard through the extensions' built-in speakers.

Any Telephone

Lift the handset or press SP-PHONE/MONITOR. | Dial 33. | Dial the group number (1 through 8). | Confirmation tone | Announce. | Wait for an answer. | Talk.

External

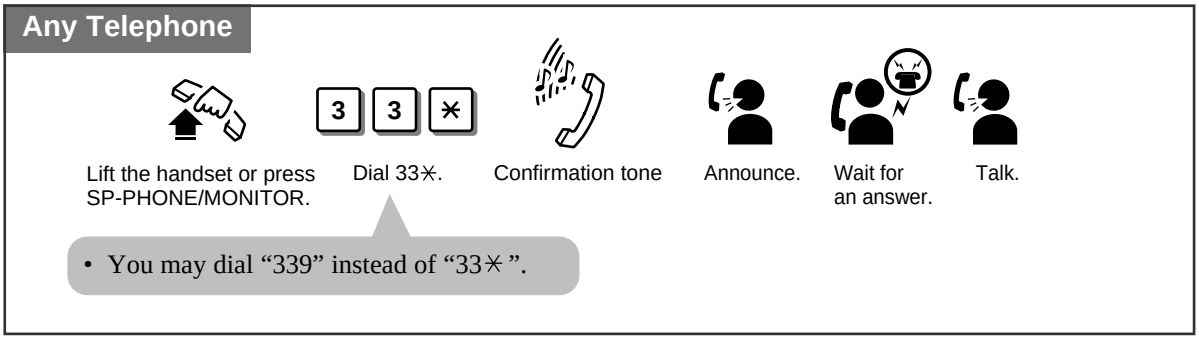
Allows you to make a voice announcement over the external pager.

Any Telephone

Lift the handset or press SP-PHONE/MONITOR. | Dial 34. | Confirmation tone (optional) | Announce. | Wait for an answer. | Talk.

All extensions & External

Allows you to make a voice announcement to all extensions. Your message is announced over the built-in speakers of proprietary telephones (PT) and the external pager.

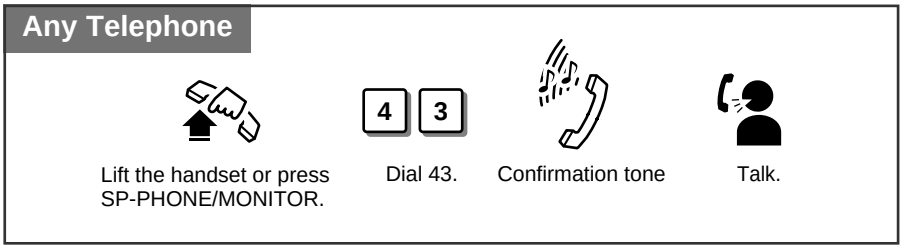


- If the pager is in use, a busy tone will be heard.
- The paged extension users hear a splash tone before the voice announcement.
- You will hear a splash tone from the external pager (External Pager Confirmation Tone) at the paged side before the voice announcement. The tone can be disabled.
- You will hear a confirmation tone before making the voice announcement.
- More than one person cannot use the paging feature at the same time.
- You cannot page extensions which have set the DND or Paging-Deny feature, or which are in use.

- 1.7 Useful Features, “Rejecting Incoming Calls (Do Not Disturb — DND)”
- See the Installation Manual, Section 3, “Paging”.

Answering a Page

Allows you to answer an announced page at any extension within the system.



PT

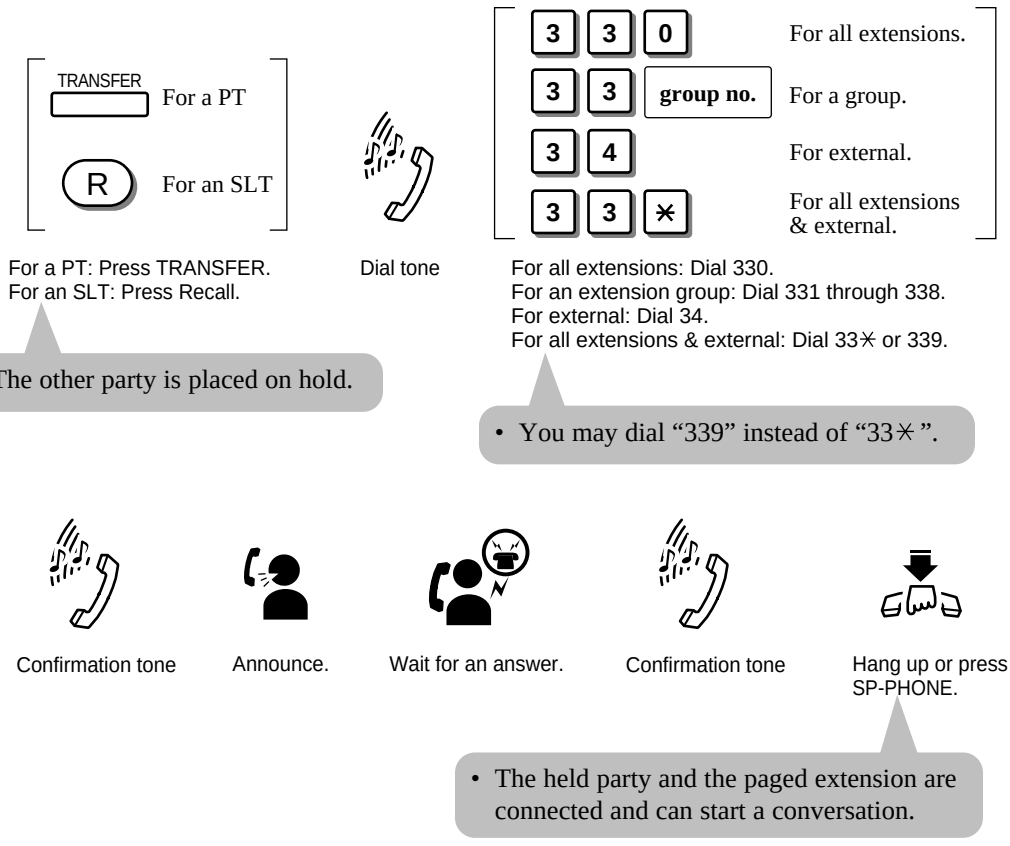
- You will hear a confirmation tone when the page is answered.
- If an outside call has been paged and transferred, you can answer the call by pressing the corresponding line key whose indicator is flashing slowly.

Transferring after paging (Paging and Transfer)

You can transfer a call using the paging function (All Extensions, Group, External, or All Extensions & External).

PT and SLT

During a conversation


TRANSFER
For a PT
R
For an SLT
For a PT: Press TRANSFER.
For an SLT: Press Recall.
• The other party is placed on hold.
Dial tone
3 3 0
For all extensions.
3 3 group no.
For a group.
3 4
For external.
3 3 ✳
For all extensions & external.
For all extensions: Dial 330.
For an extension group: Dial 331 through 338.
For external: Dial 34.
For all extensions & external: Dial 33✳ or 339.
• You may dial "339" instead of "33✳".
Confirmation tone
Announce.
Wait for an answer.
Confirmation tone
Hang up or press SP-PHONE.
• The held party and the paged extension are connected and can start a conversation.

- If the external paging access tone is set to "Disable", a splash tone from the external paging equipment will not be heard after accessing external paging. Refer to System Programming, "External Paging Access Tone".

SLT

- If "Hold-3" is assigned in System Programming, you must dial "50" after pressing the Recall button.

Paging Deny

A page sent to a built-in speaker can be denied by any extension in the system.

Setting / Cancelling

PT

Lift the handset or press SP-PHONE/MONITOR.

7 3 4 1 # To set.
7 3 4 0 # To cancel.

To set: Dial 7341#.
To cancel: Dial 7340#.

Hang up or press SP-PHONE/MONITOR.

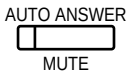
Turning the Microphone off (Microphone Mute)

Allows you to turn off the microphone so you can consult privately with others in the room. You will still be able to hear the other party.

Setting

PT

During a conversation in the handsfree mode



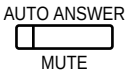
Press AUTO ANSWER/MUTE.

- The AUTO ANSWER/MUTE indicator light flashes red slowly.

Cancelling

PT

When microphone mute is established



Press AUTO ANSWER/MUTE.

- The AUTO ANSWER/MUTE indicator light turns off.

PT • This feature is only available during a handsfree conversation.

• See the Installation Manual, Section 3, “Microphone Mute”.

Forwarding Calls (Call Forwarding)

Automatically transfers incoming calls to another extension or to an external destination. The following types are available.

TYPE	DESCRIPTION
All Calls	All incoming calls are forwarded to another extension.
Busy or No Answer	All incoming calls are forwarded to another extension when you do not answer or when your extension is busy.
To Exchange Line	All incoming calls are forwarded to an exchange line.
Follow Me	Allows you to set “Call Forwarding — All Calls” feature from another extension.

Note: You can also set Voice Mail as the forwarding destination. Refer to “Voice Mail Integration for KX-TVP100” in this manual.

- To cancel the Call Forwarding features, refer to “Cancel” in this feature.
- Call Forwarding can only be extended to one target telephone. For example, extension A is forwarded to extension B, and if extension B tries to set Call Forwarding to extension C, an alarm tone is heard and the setting is rejected.
  If extension B has already set Call Forwarding to extension C, and extension A tries to set Call Forwarding to extension B, the setting will be also rejected.

- If the destination extension has already set “Do Not Disturb”, you cannot forward any calls to the extension.
- There should be at least one extension that can receive calls in the same UCD group.
- When a UCD extension which sets “Call Forwarding” function receives a call, the call will not be forwarded and the system will search for an idle extension in the UCD group first. But if the UCD extension is the last one that can receive the call, it will be forwarded to the assigned extension by “Call Forwarding”.
- Setting a new “Call Forwarding” function (All Calls, Busy or No Answer, etc.) cancels any other “Call Forwarding” functions or the “Do Not Disturb (DND)” function.
- If your entry is valid, confirmation tone 1 (1 beep) is sent. If your entry is the same as previously programmed data, confirmation tone 2 (2 beeps) is sent. Refer to the “Tone List” in the Appendix (Section 2).
- You can call the original extension from the Call Forwarding destination extension (for example: Boss/Secretary working).
- Camp-On recall and Hold recall are not forwarded.

PT • A flexible line key on a proprietary telephone which is not provided with FWD/DND button can be assigned as the FWD/DND button.

PT • The lighting patterns of the FWD/DND button are as follows.
Off: Both functions are not set.
Red: DND mode
Flashing red slowly: FWD mode

PT • You can check the assignment by pressing the FWD/DND button while on-hook.

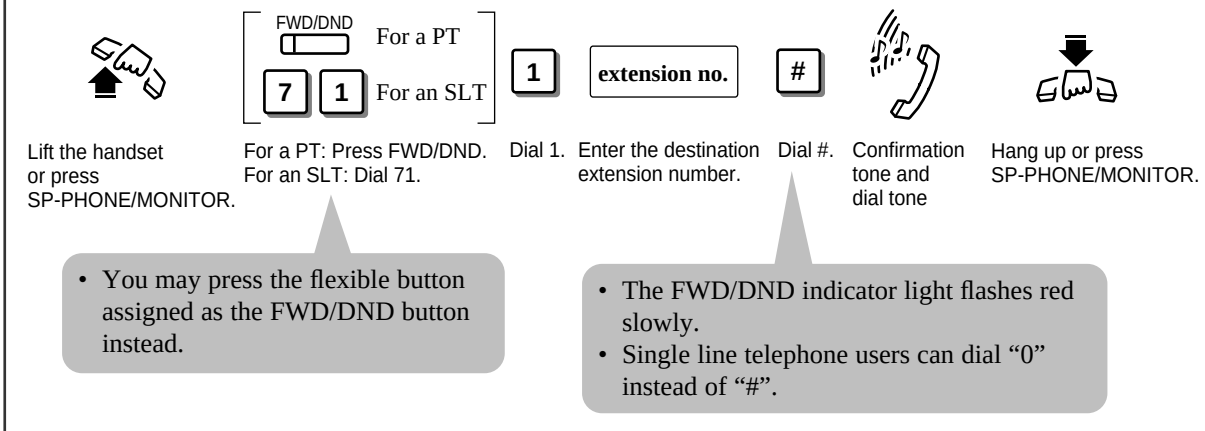
- 1.2 Proprietary Telephone Settings, “Customising the Buttons on Your Telephone”, FWD/DND Button
- 1.7 Useful Features, “Rejecting Incoming Calls (Do Not Disturb — DND)”
- 1.7 Useful Features, “Voice Mail Integration for KX-TVP100”
- See the Installation Manual, Section 3, “Call Forwarding”.

All Calls

You can re-direct all of your calls to another extension.

Setting

PT and SLT

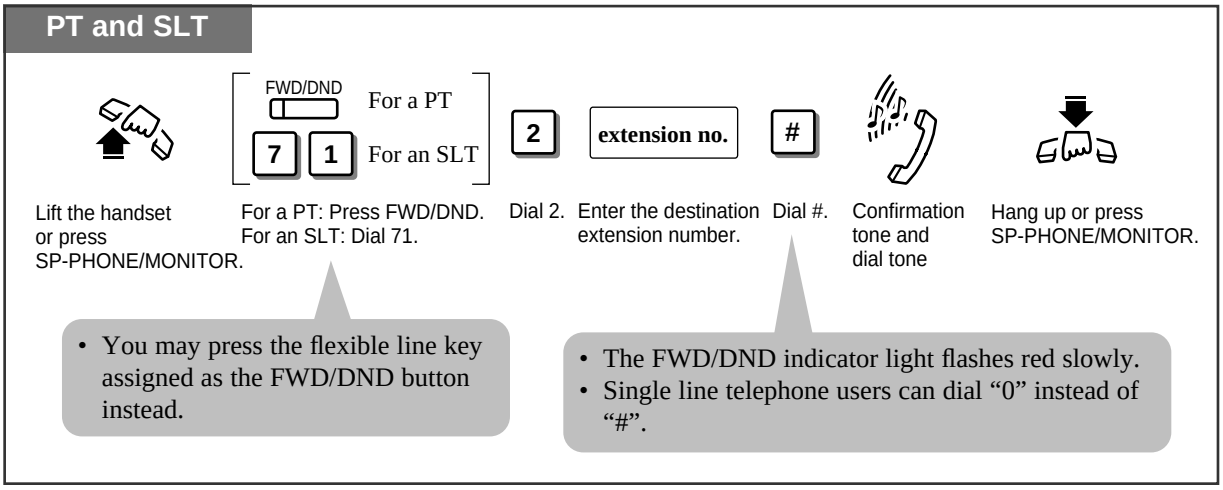

FWD/DND
For a PT
7
1
For an SLT
1
extension no.
#
Lift the handset or press SP-PHONE/MONITOR.
For a PT: Press FWD/DND. For an SLT: Dial 71.
Dial 1.
Enter the destination extension number.
Dial #.
Confirmation tone and dial tone
Hang up or press SP-PHONE/MONITOR.
• You may press the flexible button assigned as the FWD/DND button instead.
• The FWD/DND indicator light flashes red slowly.
• Single line telephone users can dial “0” instead of “#”.

Busy or No Answer

You can forward your calls to another extension when your extension is busy or if you do not answer the call within a pre-determined time.

Setting

PT and SLT


FWD/DND
For a PT
7
1
For an SLT
2
extension no.
#
Lift the handset or press SP-PHONE/MONITOR.
For a PT: Press FWD/DND. For an SLT: Dial 71.
Dial 2.
Enter the destination extension number.
Dial #.
Confirmation tone and dial tone
Hang up or press SP-PHONE/MONITOR.
• You may press the flexible line key assigned as the FWD/DND button instead.
• The FWD/DND indicator light flashes red slowly.
• Single line telephone users can dial "0" instead of "#".

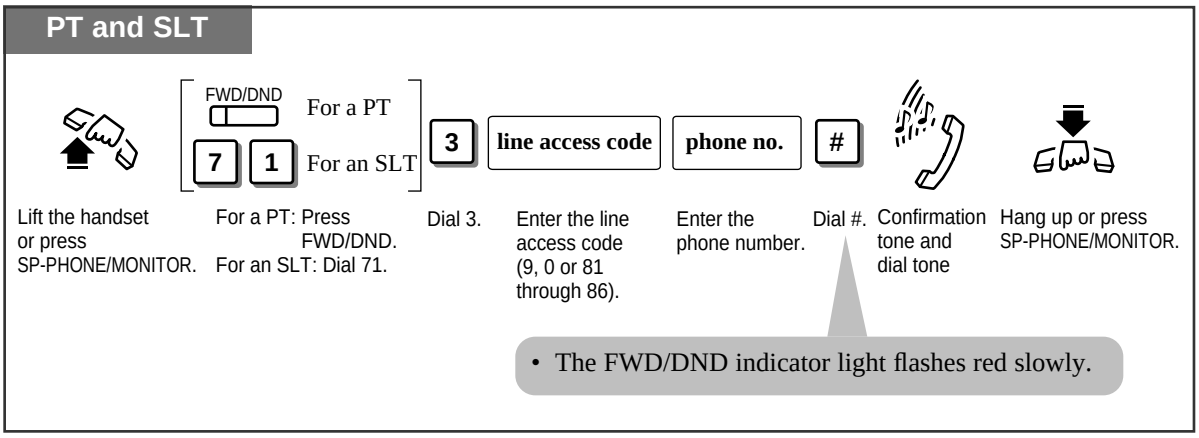
- 1.2 Proprietary Telephone Settings, "Customising Your Telephone Functions", Intercom Alert Assignment

To Exchange Line

You can forward intercom calls to an external party.
System Programming is required to execute this feature.

Setting

PT and SLT



- Up to 32 digits (including the line access code) can be programmed.
- In the account code verify-all and forced modes, an account code must be stored by pressing "✳✳" and entering the account code after the line access code ("✳" is not regarded as a pause).

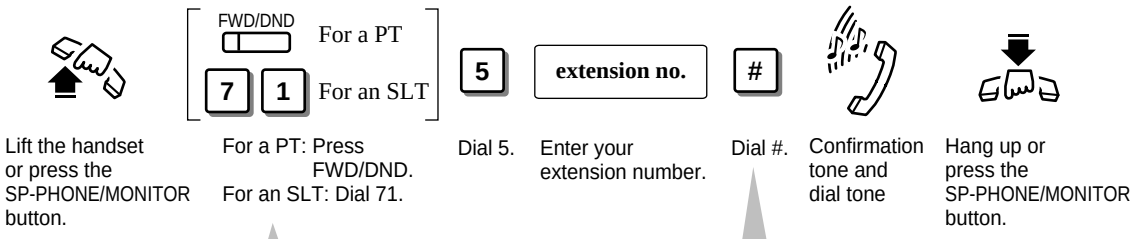
Follow Me

You can set the “Call Forwarding” feature from the destination extension. This is useful if you forget to set “Call Forwarding — All Calls” before you leave your desk.

Setting

PT and SLT

At the destination extension



- You may press the flexible line key assigned as the FWD/DND button instead.
- The FWD/DND indicator light flashes red slowly.
- Single line telephone users can dial “0” instead of “#”.

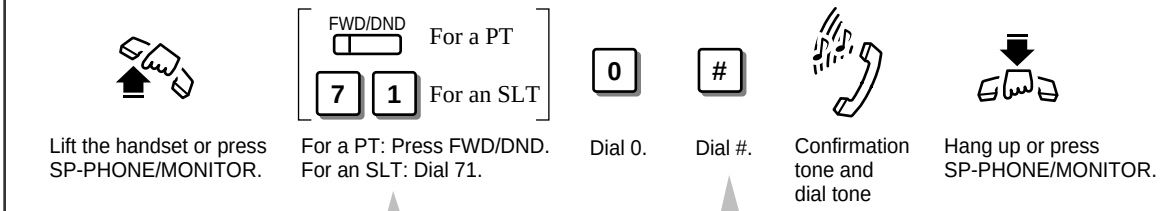
- This feature can be cancelled at your extension or the destination extension.

Cancel

There are two cancelling methods for “Call Forwarding”. The cancelling depends on the Call Forwarding type that has been assigned.

Cancelling Call Forwarding at your (original) extension

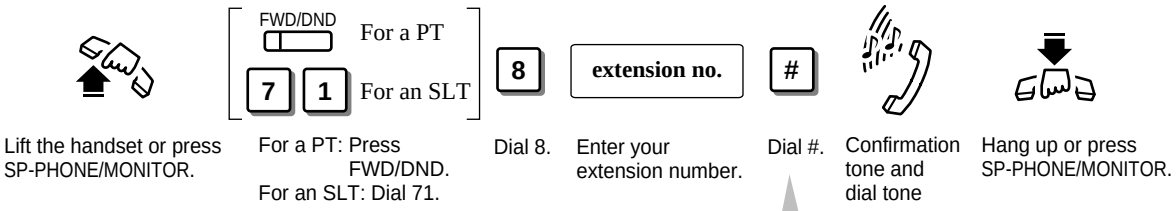
PT and SLT



- You may press the flexible button assigned as the FWD/DND button instead.
- The FWD/DND indicator light turns off.
- Single line telephone users can dial “0” instead of “#”.

Cancelling Call Forwarding at the destination extension — “Follow Me (All Calls)” only

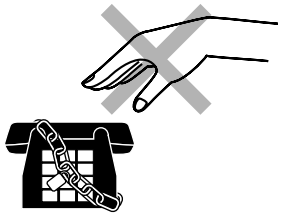
PT and SLT



- You may press the flexible line key assigned as the FWD/DND button instead.
- The FWD/DND indicator light turns off at your extension.
- Single line telephone users can dial “0” instead of “#”.

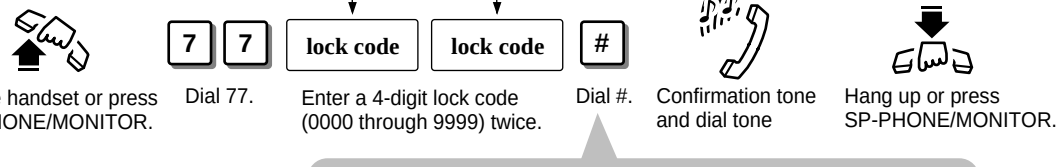
Locking Your Telephone (Electronic Extension Lockout)

Allows you to lock your extension so that other users cannot make outside calls from your extension.



Locking

Any Telephone



- Single line telephone users can dial “0” instead of “#”.

Unlocking

Any Telephone

- Single line telephone users can dial “0” instead of “#”.

- If another user tries to access an exchange line and attempts to dial from a locked extension, the user will hear a reorder tone and for PT users “Restricted” is shown on the display. However, calls can be made at a locked extension depending on system programming. System programming determines which COS number applies to calls at the locked extension.
- An extension assigned as an operator or manager can cancel this function for all extensions (Electronic Extension Lockout — CANCEL ALL).
- “Remote Extension Lock Control” overrides this feature. If the operator or manager sets Remote Extension Lock on the extension you have already locked, you cannot unlock it.
- The lock code must be 4 numerical digits. The “#” and “✳” digits may not be used.
- You can make intercom calls and receive intercom or outside calls at a locked extension.
- You can make outside calls depending on the level of call barring.

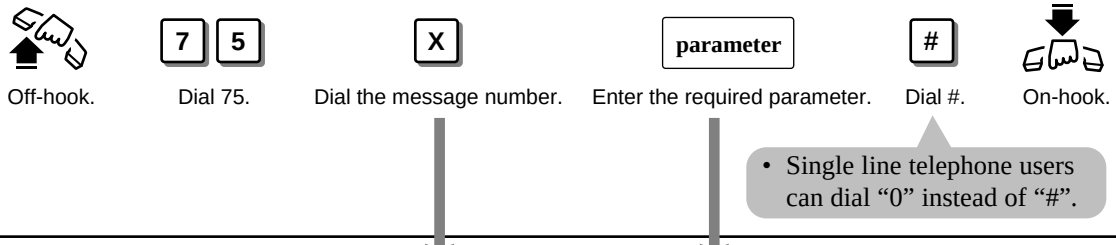
- 1.8 Operator/Manager Service Features, “Electronic Extension Lockout — CANCEL ALL”
- 1.8 Operator/Manager Service Features, “Remote Extension Lock”
- See the Installation Manual, Section 3, “Call Barring — Extension Lock Boundary Class”.
- See the Installation Manual, Section 3, “Extension Lock”.

Showing Your Message on the Calling Party's Display (Absent Message Capability)

When a caller using a proprietary telephone with a LCD dials another extension, a programmed Absent Message (Message 1 through 6) will be displayed on the calling party's LCD. Absent Messages can be set at any telephone (SLT or PT).

Setting the absent message

Any Telephone



Display Message	Message No.	Parameter
Will Return Soon	1	
Gone Home	2	
At Ext %%% *(extension number)*	3	extension no. — Enter the extension number (100 though 199).
Back at %%:%% AM (or PM) *(hour:minute)*	4	hour — Enter the hour (01 through 12). minute — Enter the minute (00 through 59). 0 or 1 — For AM: press 0. For PM: press 1.
Out Until %%/%% *(day/month)*	5	month — Enter the month (01 through 12). day — Enter the day (01 through 31).
In a Meeting	6	
Cancel	0	

Note: % indicates where you enter the desired parameter.

! PT • To confirm the message, go off-hook. It will be displayed.

• See the Installation Manual, Section 3, "Absent Message Capability".

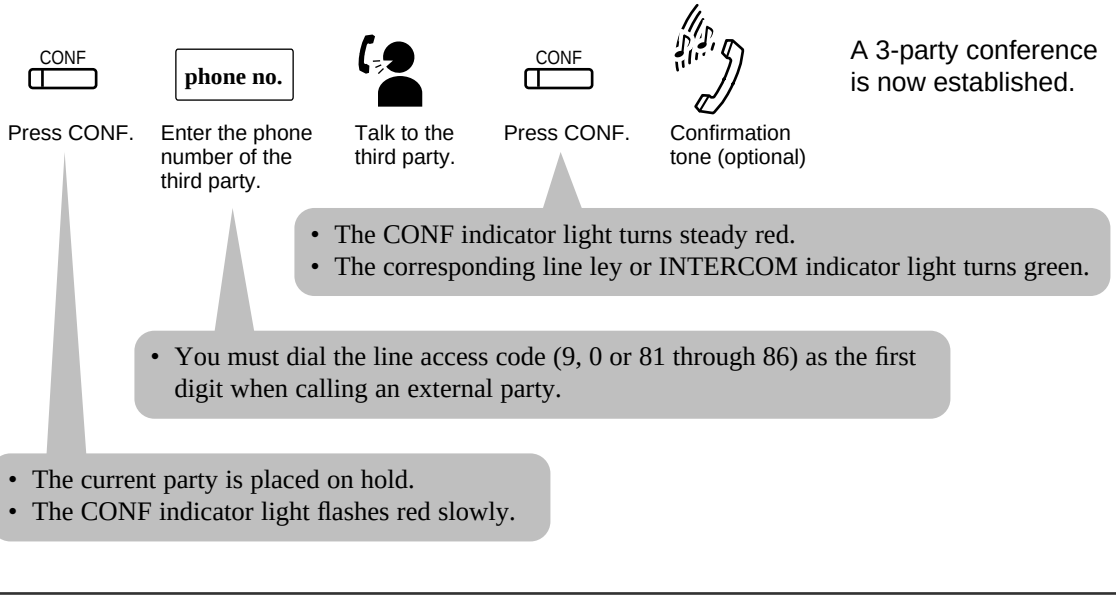
Conference (3-party)

During a 2-party conversation, you can add a third party to make a 3-party conference. The maximum number of extensions and exchange lines in a conference can be changed by System Programming.

Establishing a conference

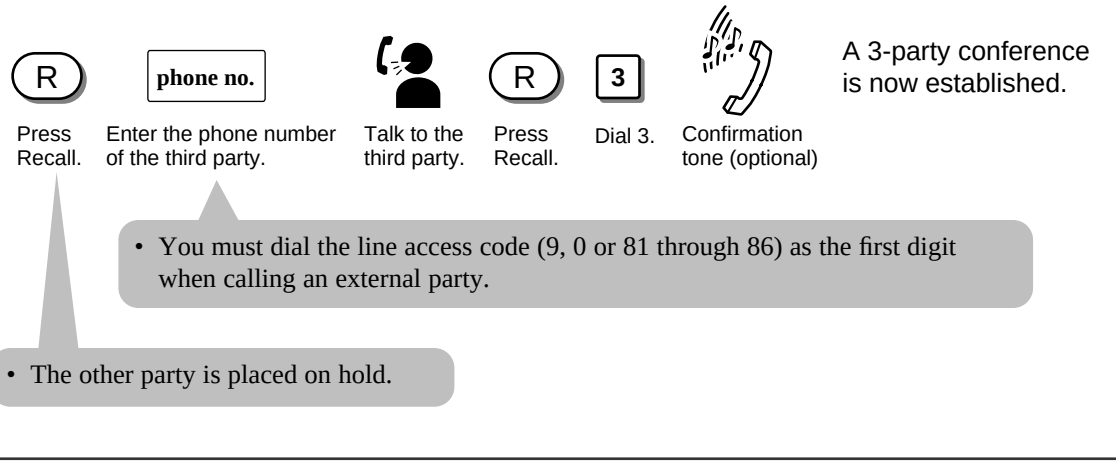
PT

During a 2-party conversation


CONF
phone no.
CONF
Press CONF.
Enter the phone number of the third party.
Talk to the third party.
Press CONF.
Confirmation tone (optional)
A 3-party conference is now established.
• The CONF indicator light turns steady red.
• The corresponding line ley or INTERCOM indicator light turns green.
• You must dial the line access code (9, 0 or 81 through 86) as the first digit when calling an external party.
• The current party is placed on hold.
• The CONF indicator light flashes red slowly.

SLT

During a 2-party conversation


R
phone no.
R
3
Press Recall.
Enter the phone number of the third party.
Talk to the third party.
Press Recall.
Dial 3.
Confirmation tone (optional)
A 3-party conference is now established.
• You must dial the line access code (9, 0 or 81 through 86) as the first digit when calling an external party.
• The other party is placed on hold.

To leave the conference

Any telephone

Hang up or press SP-PHONE.

- The other two parties may continue their conversation.
- If the other two parties are both exchange lines, they will be disconnected.

To talk to the original party while holding the third party

SLT

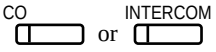
Press Recall.

Confirmation tone (optional)

Talk to the original party.

To terminate one party and talk to the other

PT



Press the line key or INTERCOM of the party to remain connected.

Confirmation tone (optional)

Talk.

- A conversation with the desired party is established and the other party is disconnected.

- A conference call can also be established by “Executive Busy Override”.
- When a 2-party call is changed to a 3-party call or vice versa, a confirmation tone is sent to all parties. The tone can be disabled.

PT
- Pressing a line key which is not in the conference allows you to exit from the conference, leaving the other two parties connected unless they are both exchange lines.
  If the other parties are both exchange lines, they will be disconnected.

PT
- If the third party does not answer, press the line key or INTERCOM button to return to the second party.

PT
- To change a 3-party conference to a 5-party conference, refer to “Conference (5-party)”.

SLT
- You can return to the original party before the third party answers by pressing the Recall button.

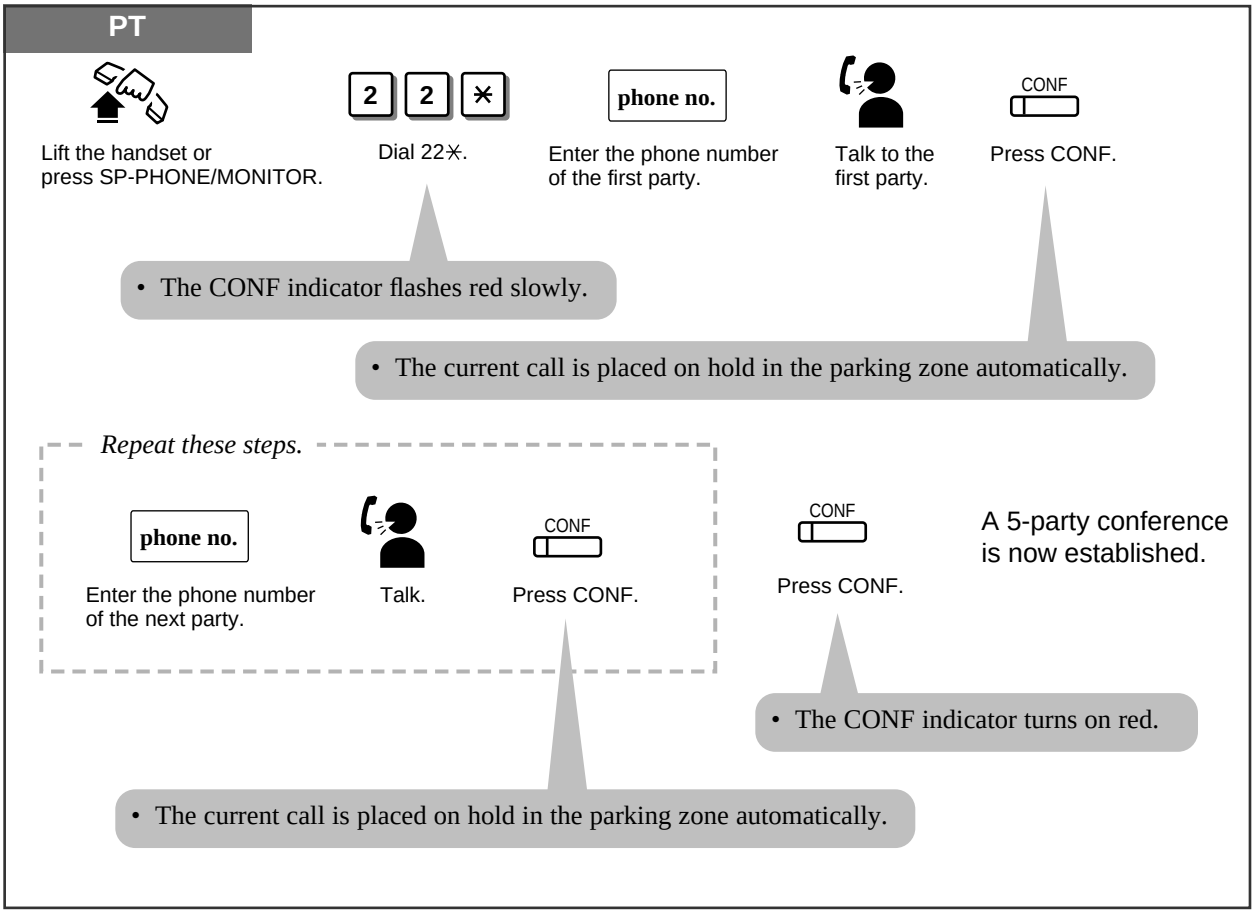
SLT
- If “Hold-2” or “Hold-3” is assigned in System Programming, you must dial “50” after pressing the Recall button.

- 1.2 Proprietary Telephone Settings, “Customising the Buttons on Your Telephone”, CONF (Conference) Button
- 1.3 Making Calls, “Interrupting an Existing Call (Executive Busy Override)”, Executive Busy Override — Extension, Executive Busy Override — Exchange Line
- See the Installation Manual, Section 3, “Conference (3-party)”.

Conference (5-party)

Allows you to establish a 5-party conference. The members of a conference may be up to 5 extensions, or 3 extensions and 2 exchange lines.

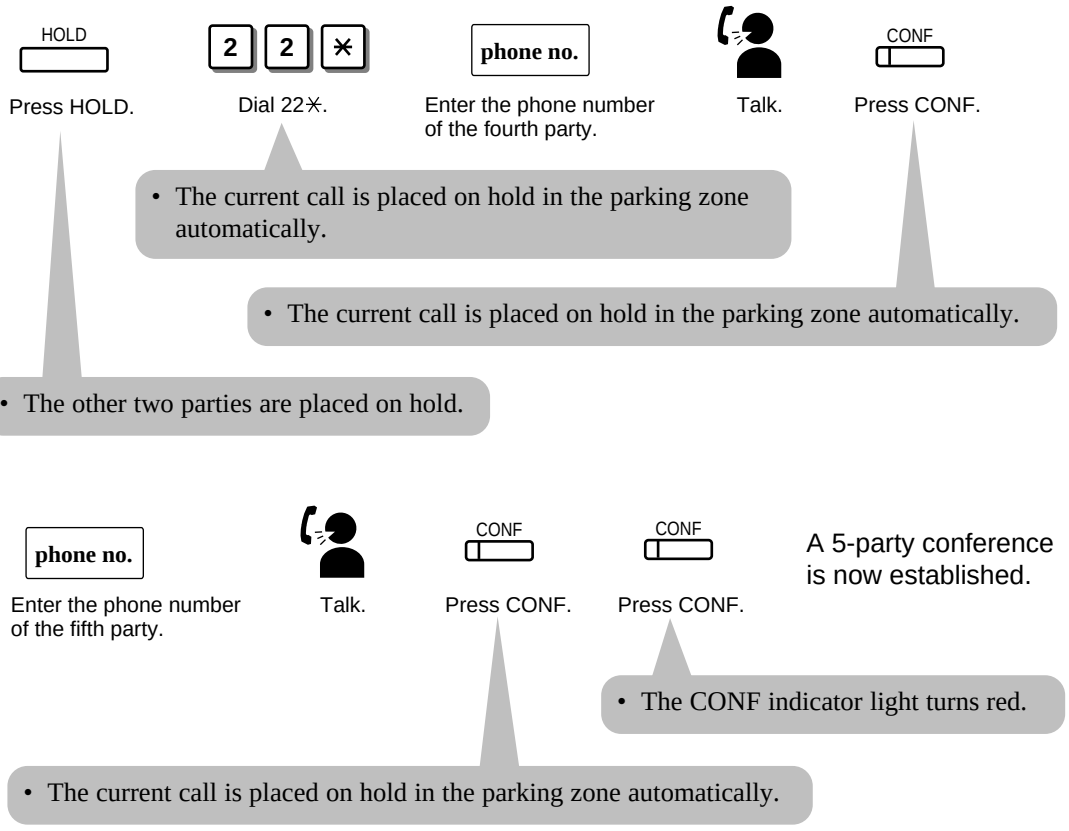
Establishing a conference


PT
Lift the handset or press SP-PHONE/MONITOR.
2 2 *
Dial 22*.
phone no.
Enter the phone number of the first party.
Talk to the first party.
CONF
Press CONF.
• The CONF indicator flashes red slowly.
• The current call is placed on hold in the parking zone automatically.
Repeat these steps.
phone no.
Enter the phone number of the next party.
Talk.
CONF
Press CONF.
CONF
Press CONF.
A 5-party conference is now established.
• The CONF indicator turns on red.
• The current call is placed on hold in the parking zone automatically.

To change to a 5-party conference during a 3-party conference

PT

During a 3-party conversation


HOLD
Press HOLD.
2 2 *
Dial 22*.
phone no.
Enter the phone number of the fourth party.
Talk.
CONF
Press CONF.
• The current call is placed on hold in the parking zone automatically.
• The current call is placed on hold in the parking zone automatically.
• The other two parties are placed on hold.
phone no.
Enter the phone number of the fifth party.
Talk.
CONF
Press CONF.
CONF
Press CONF.
A 5-party conference is now established.
• The CONF indicator light turns red.
• The current call is placed on hold in the parking zone automatically.

- PT • System programming is required to execute this feature.
- PT • Up to 2 exchange lines can join a conference.
- PT • When a 5-party conference is changed to a 4-party conference, a confirmation tone is sent to all parties. The tone can be disabled.
- PT • A 3-party conference between 3 extensions cannot be changed to a 5-party conference. (The HOLD button cannot be used.)
- PT • When a 5-party conference is established, a confirmation tone is sent to all parties. The tone can be disabled.
- PT • More than one 5-party conference cannot be established at the same time.
- PT • The Unattended Conference and Executive Busy Override features are not available during a 5-party conference.
- PT • During a 5-party conference, the Call Park feature cannot be used by another extension.
- PT • If parked calls are not retrieved within 5 minutes during a 5-party conference, ringing or an alarm tone will be heard (Call Park Recall).
- PT • When the extension who started the 5-party conference goes on-hook, the 5-party conference is terminated.
- PT • When an incoming call is received, a Call Waiting tone is heard. You can answer the call after leaving the conference by going off-hook.
- SLT • This feature cannot be used with a single line telephone.

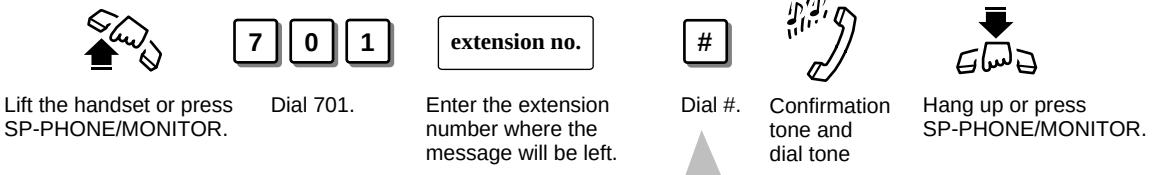
- 1.3 Making Calls, “Interrupting an Existing Call (Executive Busy Override)”
- 1.5 During a Conversation, “Call Waiting”
- 1.7 Useful Features, “Conference (3-party)”
- 1.7 Useful Features, “Conference, Unattended”
- See the Installation Manual, Section 3, “Conference (5-party)”.

Leaving a Message (Message Waiting)

When the called extension is busy or does not answer your call, you can leave a message so that the called party may call you back.
As a message receiver, the MESSAGE button light lets you know that a call has been received. If you receive a message, you can call back the original party by a simple operation.
This feature is available only for proprietary telephones with a MESSAGE button.

Leaving a message

Any Telephone



Lift the handset or press SP-PHONE/MONITOR. | Dial 701. | Enter the extension number where the message will be left. | Dial #. | Confirmation tone and dial tone | Hang up or press SP-PHONE/MONITOR.

- Single line telephone users can dial “0” instead of “#”.

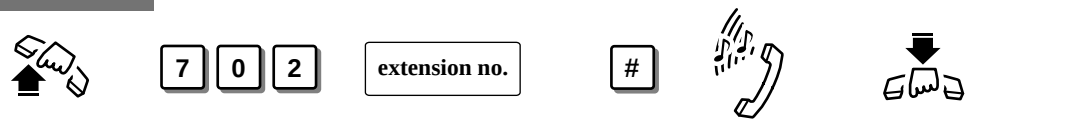
PT

If the called extension is busy or does not answer

Press MESSAGE. | Confirmation tone and dial tone | Hang up or press SP-PHONE/MONITOR.

Cancelling a message

Any Telephone



Lift the handset or press SP-PHONE/MONITOR. | Dial 702. | Enter the extension number where you left a message. | Dial #. | Confirmation tone and dial tone | Hang up or press SP-PHONE/MONITOR.

- Single line telephone users can dial “0” instead of “#”.

Cancelling using the MESSAGE button

PT

Lift the handset or press SP-PHONE/MONITOR. | Enter the extension number where you left a message. | Press MESSAGE twice. | Confirmation tone and dial tone | Hang up or press SP-PHONE/MONITOR.

Checking and Selecting a message by the message receiver

If there is a message, the message waiting lamp (MESSAGE indicator) light will be on.

PT

When the telephone is idle and on-hook

MESSAGE

Press MESSAGE repeatedly until the desired message appears.

- The stored messages are shown on the display in the order they were received.

Calling back the message sender

PT

Lift the handset or press SP-PHONE/MONITOR.

MESSAGE

Press MESSAGE.

Talk.

- If you have more than one message at your extension, the line connects you to the selected message sender.
- The message is cleared after the conversation.

Clearing all messages by the message receiver

PT

Lift the handset or press SP-PHONE/MONITOR.

7 0 0

Dial 700.

#

Dial #.

Hang up or press SP-PHONE/MONITOR.

- All messages are cleared.

! PT • Each extension can have a maximum of 8 simultaneous messages. If you try to set the ninth message, you will hear reorder tone.

PT • If the MESSAGE indicator does not go out after returning a message, there is another message.

PT • If multiple message notifications are left at your extension, call back is executed in the order received.

PT • If you select a specific message to call back, the other call backs will be executed in the order received, starting with the one selected.
(e.g.) 5 → 6 → 7 → 8 → 1 → 2 → 3 → 4

- 1.2 Proprietary Telephone Settings, “Customising the Buttons on Your Telephone”, Restoring the MESSAGE Button
- See the Installation Manual, Section 3, “Message Waiting”.

Calling with Account Codes (Account Code Entry)

An account code is used to identify outside calls for accounting and billing purposes. The account code is appended to the "Station Message Detail Recording (SMDR)" call record. For incoming outside calls, account codes are not required. For outgoing outside calls, account codes are often required. You can enter account codes in the following 4 modes.

Verify - All mode: You must always enter a pre-set account code.

Verify - Toll (Call Barring) mode: You can enter a pre-set account code so that you can override call barring.

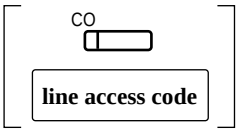
Option mode: An account code can be entered when a record of the account code is required. It can be any number.

Forced mode: You must always enter an account code. It can be any number.

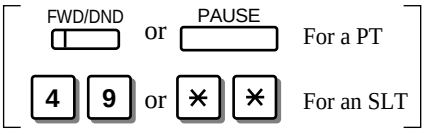
Making calls with account codes except in the Option mode

PT and SLT

Lift the handset or press SP-PHONE/MONITOR.



Press line key or enter a line access code (9, 0 or 81 through 86).



For a PT: Press FWD/DND or PAUSE.
For an SLT: Dial 49 or ✳✳.

Dial tone 3

account code

Enter an account code (4 digits).

Dial tone

phone no.

Enter the phone number.

Making calls with account codes in the Option mode and receiving calls

PT

During a conversation or while hearing a reorder tone after the other party hangs up (within 30 seconds)

Press FWD/DND.

account code

Enter an account code (4 digits).

- You can keep talking.

- In the Verify-All mode, you must always enter a pre-set account code when making an outside call. In the Verify-Toll (Call Barring) mode, you can enter a pre-set account code only when you need to override call barring.
- You do not need to make an account code entry when receiving incoming calls.
- You can clear and re-enter a number by pressing "✳✳" or the FWD/DND button while entering an account code.
- An account code can be stored into Auto Dialling ("One-Touch Dialling", "Pickup Dialling", "System/Personal Speed Dialling", "Call Forwarding — to Exchange Line"). To store an account code, "✳✳" must be entered before the account code.

  Example (Pickup Dialling):

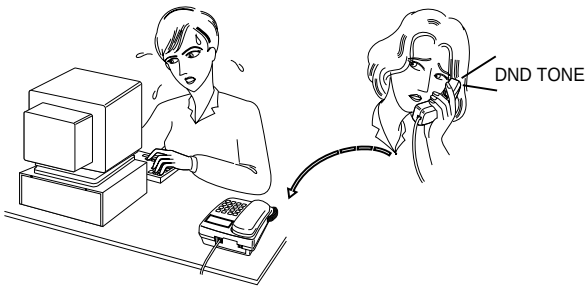
  — [Off-hook] [742] [Line Access Code] [✳✳] [Account Code] [Phone Number] [#] [On-hook]
- If the account code entered does not match the pre-set account code in the verify-all mode, when making an outside call, reorder tone is heard.

PT
- An account code has 4 digits (0 through 9). RECALL, PAUSE, etc. cannot be used.

- See the Installation Manual, Section 3, "Station Message Detail Recording (SMDR)".
- See the Installation Manual, Section 3, "Account Code Entry".
- See the Installation Manual, Section 3, "Call Barring Override by Account Codes".

Rejecting Incoming Calls (Do Not Disturb — DND)

Allows you to prevent other parties from disturbing you. Your extension will not receive intercom or outside calls.



Setting / Cancelling

PT and SLT

Lift the handset or press SP-PHONE/MONITOR.

FWD/DND For a PT

7 1 For an SLT

For a PT: Press FWD/DND.
For an SLT: Dial 71.

4 To set.

0 To cancel.

To set: Dial 4.
To cancel: Dial 0.

#

Dial #.

Confirmation tone and dial tone

Hang up or press SP-PHONE/MONITOR.

- Single line telephone users can dial “0” instead of “#”.

- A calling extension that has “Do Not Disturb (DND) Override” enabled can call your extension even if “Do Not Disturb (DND)” is set.
- DND also blocks paging announcements.
- If the Call Forwarding feature has already been set, setting the DND feature will cancel Call Forwarding.
- The Timed Reminder alarm and Hold Recall features override this feature.

PT
- A flexible line key on a proprietary telephone which is not provided with FWD/DND button can be assigned as the FWD/DND button.

PT
- If the “Do Not Disturb (DND)” mode is set, you can still answer a call by pressing the line key.

PT
- The lighting patterns of the FWD/DND button are as follows.
  Off: Both functions are not set.
  Red: DND mode
  Flashing red slowly: FWD mode

- 1.2 Proprietary Telephone Settings, “Customising the Buttons on Your Telephone”, FWD/DND Button
- 1.6 Before Leaving Your Desk, “Forwarding a Call (Call Forwarding)”
- 1.7 Useful Features, “Calling an Extension which Has Do Not Disturb Set (Do Not Disturb Override)”
- See the Installation Manual, Section 3, “Do Not Disturb (DND)”.

Calling an Extension which Has Do Not Disturb Set (Do Not Disturb Override)

Allows you to call an extension even though the “Do Not Disturb — DND” feature is set. System Programming is required to use this feature.

Any Telephone

If you make an intercom call and hear a Do Not Disturb (DND) tone

DND tone

Dial 2.

Wait for an answer.

- If you hear a reorder tone after dialling 2, the “Do Not Disturb Override” feature is not set at your extension.
- If you hear a busy tone after dialling 2, the line is busy. You can use the Automatic Callback Busy feature.

- 1.7 Useful Features, “Rejecting Incoming Calls (Do Not Disturb — DND)”
- See the Installation Manual, Section 3, “Do Not Disturb (DND)”.

Secret Dialling

Allows you to conceal all or part(s) of a “System Speed Dialling number” or “One-Touch Dialling number” assigned to a flexible line key, both which normally appear on the display.

PT

When storing the phone number

Press INTERCOM before and after the part you wish to conceal.

<PT Display Example>

`901344-853[506]` — “506” is not shown on the display when you dial.

- PT • A secret code, “[” or “]” (pressing the INTERCOM button), is counted as 1 digit.
- PT • You can conceal one or more parts of a telephone number.
- PT • If the phone number “901344-853[506]” has been stored, the display will show the following when the call is made.

  `01344-853...`

- PT • You can program whether to print out the concealed number(s) on the call logging through System Programming.
- PT • Do not press the INTERCOM button before a line access number (9, 0 or 81 through 86).

- 1.2 Proprietary Telephone Settings, “Customising the Buttons on Your Telephone”, One-Touch Dialling Button
- 1.3 Making Calls, “Dialling by Simply Pressing a Button (One-Touch Dialling)”
- 1.3 Making Calls, “Dialling using System Speed Dialling (System Speed Dialling)”
- See the Installation Manual, Section 3, “Secret Dialling”.

Alarm Setting (Timed Reminder)

You can receive a ringback at your telephone to remind you of a meeting or appointment. Either once or daily (everyday until cancelled) is available at a pre-set time. At home, you can also use this feature as a wake-up call.

Setting

Any Telephone

Lift the handset or press SP-PHONE/MONITOR.

Dial 76.

Enter the hour (01 through 12).

Enter the minute (00 through 59).

For AM: Dial 0.
For PM: Dial 1.

For a one time alarm*1: Dial 1.
For a daily alarm*2: Dial 2.

Dial #.

Hang up or press SP-PHONE/MONITOR.

- Single line telephone users can dial “0” instead of “#”.

*1 An alarm will be heard at the preset time and then the setting is cleared.
*2 An alarm will be heard daily at the preset time until the setting is changed or cancelled.

Cancelling

Any Telephone

Lift the handset or press SP-PHONE/MONITOR.

Dial 762#.

Confirmation tone and dial tone

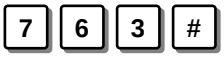
Hang up or press SP-PHONE/MONITOR.

- Single line telephone users can dial “0” instead of “#”.

Checking the set time (with a display PT only)

PT

Lift the handset or press SP-PHONE/MONITOR.



Dial 763#.

Hang up or press SP-PHONE/MONITOR.

Stopping the alarm

Any Telephone

Lift the handset.

- Pressing any key also stops the alarm.
- This tone confirms that you have a Timed Reminder.

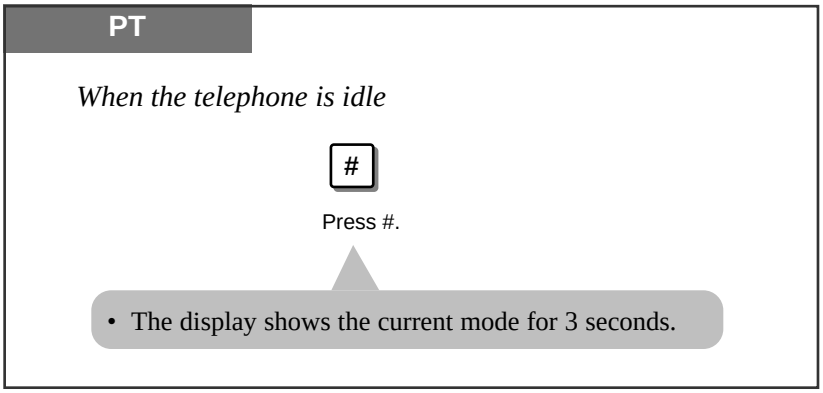
- Be sure the system clock is set correctly.
- The alarm continues for 30 seconds.
- If you receive an incoming call during the alarm, ringing starts after the alarm stops.
- If the alarm is set to sound during a conversation, the alarm will start after the conversation.
- If you set a new time, the preset time will be cleared.

- See the Installation Manual, Section 3, “Timed Reminder”.

Time (Day/Night/Lunch) Service

This system supports the Day, Night and Lunch modes. The system operation for originating and receiving calls can be different in the day, night and lunch modes. “Time Service” can only be set by the operator and manager. For a PT user, even if your extension is not assigned as the operator or manager, you can use your display to check the current mode.

Confirming the current mode (with a display PT only)



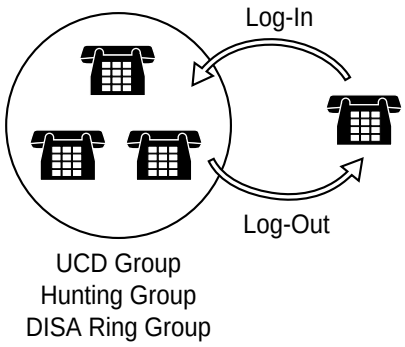
- The Day/Night/Lunch mode is automatically switched at a predetermined time (default: 9:00 a.m. for every day, 5:30 p.m. for every night), if the automatic mode is selected.

- 1.8 Operator/Manager Service Features, “Time(Day/Night/Lunch) Service Setting”
- See the Installation Manual, Section 3, “Time (Day/Night/Lunch) Service”.

Joining or Leaving a Call Distribution Group (Log-In/Log-Out)

Allows you to assign the Log-In mode or Log-Out mode within a hunting, DISA ring or UCD group. When in Log-Out mode, you can leave the group temporarily, preventing group calls from ringing at your extension. The lighting patterns of the Log-In/Log-Out button on a proprietary telephone and status are as follows.

Off: Log-In mode
Red: Log-Out mode



Log-In / Log-Out (Using the Log-In/Log-Out button)

PT

Lift the handset or press SP-PHONE/MONITOR.

Press the flexible button assigned as the Log-In/Log-Out button.

Confirmation tone and dial tone

Hang up or press SP-PHONE/MONITOR.

- The indicator light turns off in Log-In mode or turns steady red in Log-Out mode.

Log-In / Log-Out (Using the feature number)

Any Telephone

Lift the handset or press SP-PHONE/MONITOR.

7 3 6 0 # To Log-In.
7 3 6 1 # To Log-Out.

For Log-In mode: Dial 7360#.
For Log-Out mode: Dial 7361#.

Confirmation tone and dial tone

Hang up or press SP-PHONE/MONITOR.

- Single line telephone users can dial “0” instead of “#”.

- The default is “Log-In” mode.
- There should be at least one extension in the group that is logged-in.
- The last member of an extension group cannot log out.

PT

- The Log-In/Log-Out button can be assigned to a flexible line key.

- 1.2 Proprietary Telephone Settings, “Customising the Buttons on Your Telephone”, Log-In/Log-Out Button
- See the Installation Manual, Section 3, “Extension Hunting”.
- See the Installation Manual, Section 3, “Direct Inward System Access (DISA)”.
- See the Installation Manual, Section 3, “Uniform Call Distribution (UCD)”.
- See the Installation Manual, Section 3, “Log-In/Log-Out”.

Room Monitor

Allows you to monitor a room through a proprietary telephone with an AUTO ANSWER/MUTE button. The proprietary telephone you want to monitor should be set to allow monitoring beforehand. You can also monitor through a doorphone. You can use a proprietary telephone with an AUTO ANSWER/MUTE button and single line telephone with a MUTE button for monitoring.

Monitoring using a PT

PT

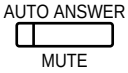
At the monitored telephone

Lift the handset or press SP-PHONE/MONITOR.

Dial 7351#.

Confirmation tone

Hang up or press SP-PHONE/MONITOR.

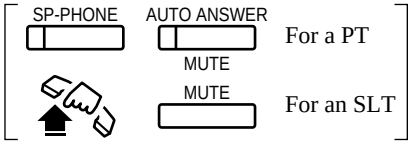


Press AUTO ANSWER/MUTE.

- The AUTO ANSWER/MUTE indicator is flashing moderately.

Monitoring

PT and SLT



For a PT: Press SP-PHONE and AUTO ANSWER/MUTE.
For an SLT: Lift the handset and press the MUTE button.

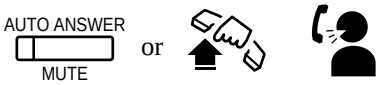
extension no.

Enter the monitored extension number (100 through 199).

Room monitoring starts.

Paging a monitored room

PT



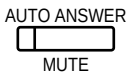
Press AUTO ANSWER/MUTE or lift the handset.

Talk.

Cancelling a monitor temporarily

PT

At the monitored telephone



Press AUTO ANSWER/MUTE.

- The AUTO ANSWER/MUTE indicator turns off.

Cancelling

PT

Lift the handset or press SP-PHONE/MONITOR.

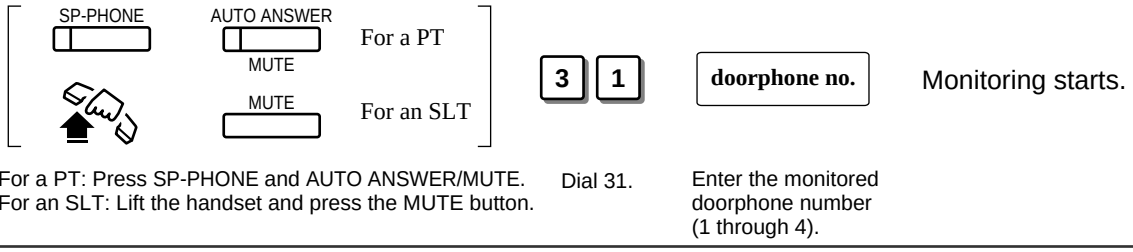
Dial 7350#.

Confirmation tone

Hang up or press SP-PHONE/MONITOR.

Monitoring through a doorphone

PT and SLT



- The doorphone access tone can be eliminated by System Programming.
- PT System Programming is required to monitor through a PT.
- PT The access tone will not be sent to the monitored PT. The paging tone will also not be sent to the monitored PT.
- PT This feature is not available when using a KX-T7050 .

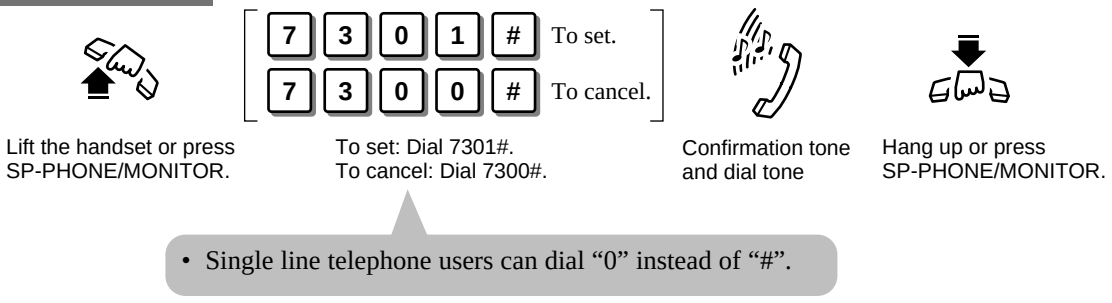
- See the Installation Manual, Section 3, “Room Monitor”.
- See the Installation Manual, Section 3, “Doorphone Call”.

Data Line Security

Your extension can be protected against interruptions from the “Call Waiting”, “Hold Alarm”, and “Executive Busy Override” features. Data communication devices, such as computers and facsimiles, can operate uninterrupted.

Setting / Cancelling

Any Telephone


7 3 0 1 #
To set.
7 3 0 0 #
To cancel.
Lift the handset or press SP-PHONE/MONITOR.
To set: Dial 7301#.
To cancel: Dial 7300#.
Confirmation tone and dial tone
Hang up or press SP-PHONE/MONITOR.
• Single line telephone users can dial “0” instead of “#”.

- 1.3 Making Calls, “Interrupting an Existing Call (Executive Busy Override)”, Executive Busy Override — Extension, Executive Busy Override — Exchange Line
- 1.5 During a Conversation “Call Waiting”
- See the Installation Manual, Section 3, “Data Line Security”.
- See the Installation Manual, Section 3, “Hold”.

Parallel Connection of a Proprietary Telephone and Single Line Telephone (Parallelled Telephone Connection)

Any extension connected to extension ports 01 through 16 can be connected in parallel with a proprietary telephone and a single line telephone. In the event of a power failure, CO1 and CO4 can be accessed using the single line telephones that are connected in parallel with the proprietary telephones to extension ports 01 and 09 respectively. If the extension receives a call, ringing will be heard from the proprietary telephone and the single line telephone. You can answer the call by using either the proprietary telephone or the single line telephone. An answering machine, facsimile, MODEM (personal computer), etc., can be connected instead of a single line telephone.
System Programming is required to enable this feature.

PT • A proprietary telephone LCD will show you the status of the single line telephone.

SLT • The following features will not work with a single line telephone connected in parallel with a proprietary telephone.
Call Splitting
External Feature Access
Account code input
Conference
Door opener while talking to the doorphone
Pickup dialling

SLT • A single line telephone connected in parallel with a proprietary telephone cannot make a call in the following cases.
— The proprietary telephone is set to the BGM mode.
— The proprietary telephone is receiving a page through the built-in speaker.
— The proprietary telephone is set to the PROGRAM mode.

SLT • A single line telephone connected in parallel with a proprietary telephone will not ring in the following cases.
— The proprietary telephone is set to Handsfree Answerback.
— The proprietary telephone is set to “Voice Call” in the Intercom Alert Assignment.

• See the Installation Manual, Section 3, “Parallelled Telephone Connection”.

Mixed Extension Dialling

Any telephone, either a KX-T7130/KX-T7020/KX-T7050, single line rotary phone (10 pps, 20 pps) or single line touch tone telephone, may be used as an extension for the system.

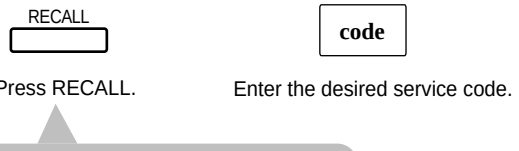
External Feature Access

Allows you to access special features (e.g. Call Waiting) offered by a host PBX or Local Exchange. This feature is effective only during an outside call. You can access the feature by using either the RECALL button or the feature number.

Using the RECALL button

PT

During a conversation with an outside party



- The current call is placed on hold.

Using the feature number

SLT

During a conversation with an outside party

- The current call is placed on hold.

! PT • A "Recall Time" must be assigned as required by the host PBX, or exchange line.

PT • You may access some features of the host PBX using the RECALL button. If the system is connected to a host PBX and the recall operation is required, follow the recall operation procedure which is required by the host PBX.

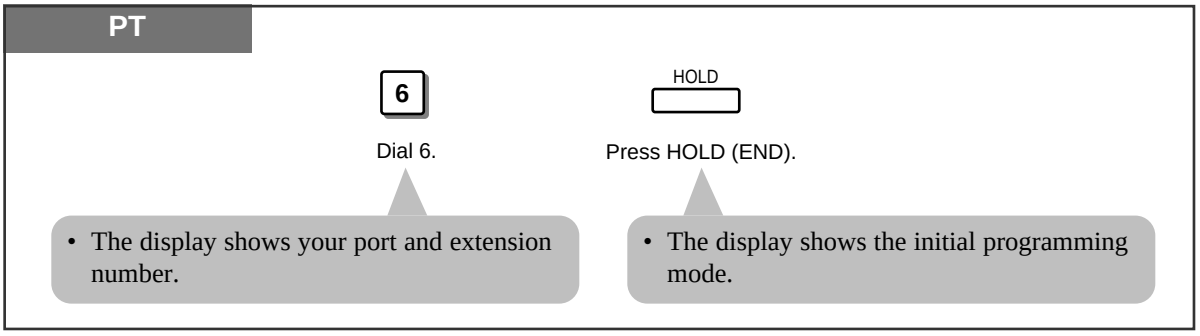
- The RECALL button also allows you to disconnect the current call and make another call without hanging up by System Programming. You can also assign a flexible key for the recall button.

- 1.2 Proprietary Telephone Settings, "Customising the Buttons on Your Telephone", One-Touch Access for System Features
- 1.3 Making Calls, "Recall"
- See the Installation Manual, Section 3, "External Feature Access".

Self-Extension Number Confirmation (KX-T7130 only)

Allows you to display your port and extension number.

To program, set the MEMORY switch on the proprietary telephone to “PROGRAM”.



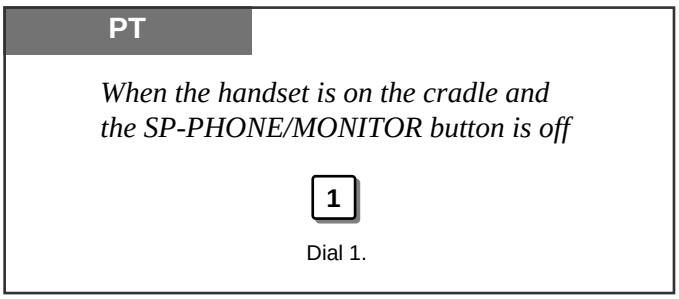
- Be sure the handset is on the cradle and the SP-PHONE button is off.
- After programming, return the MEMORY switch to the “SET” position.
- You can confirm your Self-Extension Number by pressing “✳ ✳” while on-hook.

- See the Installation Manual, Section 3, “Self-Extension Number Confirmation (KX-T7130 only)”.

Turning the Background Music on (BGM)

You can listen to background music through the built-in speaker of the telephone. An external music source, such as a radio, can be connected. The music stops whenever a call comes in, a page comes in, or you go off-hook.

Setting / Cancelling



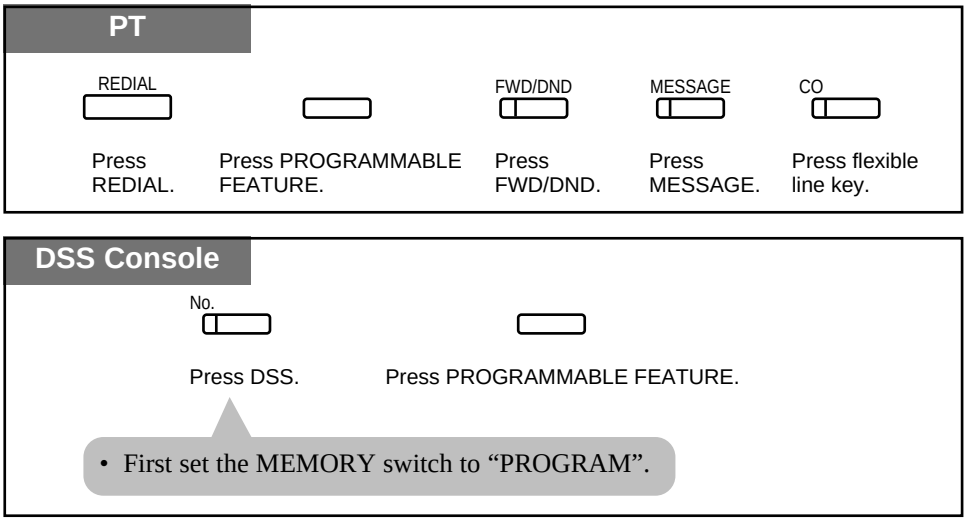
- See the Installation Manual, Section 3, “Music on Hold/Background Music (BGM)”.

Extension Button Confirmation (KX-T7130 only)

You can confirm the values stored in the button using the LCD.

Checking

Press the button you want to confirm.

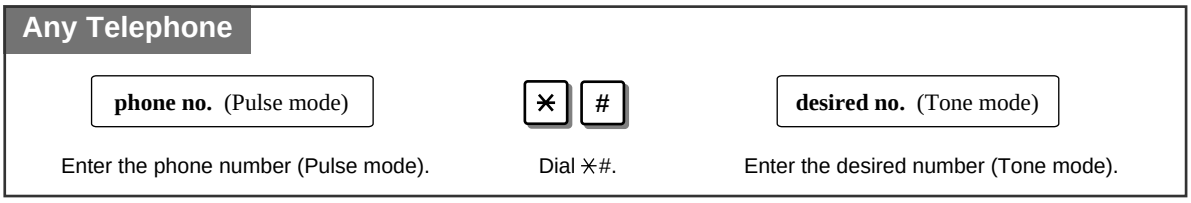


- Be sure the handset is on the cradle and the SP-PHONE button is off.
- When the display exceeds 17 characters, the “&” mark will be displayed on the right side of the LCD.
- After confirming the values stored in DSS buttons on the DSS Console, return the MEMORY switch to the “SET” position.

- See the Installation Manual, Section 3, “Extension Button Confirmation (KX-T7130 only)”.

Pulse to Tone Conversion

Allows you to change the dialling mode from Pulse to Tone to access services that require tones, such as computer based telephone services and Voice Mail.



- You cannot change from Tone to Pulse dialling mode.

- See the Installation Manual, Section 3, “Pulse to Tone Conversion”.

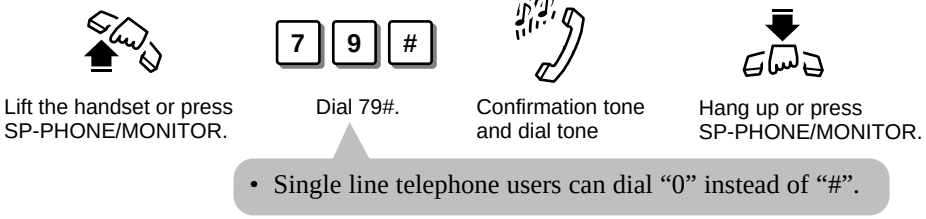
Cancelling Features (Extension Feature Clear)

Allows you to reset the following extension features to the default settings.

a) Absent Message Capability
b) Automatic Callback Busy (Camp-On)
c) Background Music (BGM)
d) Call Forwarding
e) Call Pickup Deny
f) Call Waiting
g) Data Line Security
h) Do Not Disturb (DND)
i) Executive Busy Override Deny
j) Log-In/Log-Out
k) Message Waiting
– (All messages will be erased.)
l) Pickup Dialling
– (The stored telephone number will be erased.)
m) Paging-Deny
n) Room Monitor
o) Timed Reminder
p) Voice Mail Integration

Clearing the current feature settings

Any Telephone

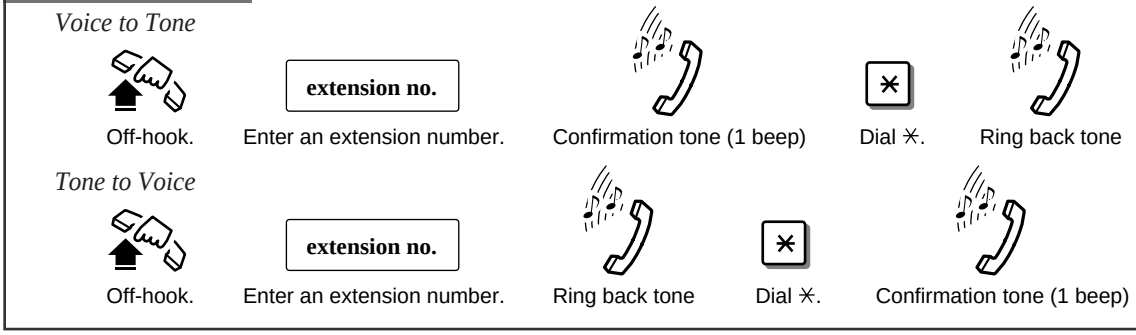

7
9
#
Lift the handset or press SP-PHONE/MONITOR.
Dial 79#.
Confirmation tone and dial tone
Hang up or press SP-PHONE/MONITOR.
• Single line telephone users can dial “0” instead of “#”.

• See the Installation Manual, Section 3, “Extension Feature Clear”.

Alternate Calling — Ring/Voice

“Voice Call” which is set at the called party’s extension can be switched to “Tone Call” (ringing) and vice versa. This feature must be set beforehand at the called party’s extension. Refer to Proprietary Telephone Settings (Section 1.2). A rotary phone cannot use this feature.

Any Telephone



• See the Installation Manual, Section 3, “Alternate Calling — Ring/Voice”.

Doorphone Call

Allows you to have a conversation with a visitor at your doorphone.
Up to 4 doorphones can be connected to the system.

Calling an extension from a doorphone

Any Doorphone

Press the Doorphone button for 1 second.

Wait for an answer and talk.

Answering a doorphone call

Any Telephone

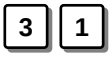
When you hear the doorphone ring tone at the extension:

Lift the handset or press SP-PHONE.

Calling a doorphone

Any Telephone

Lift the handset or press SP-PHONE.



Dial 31.

Enter a doorphone number (1 through 4).

Confirmation tone

Talk.

- An optional doorphone/door opener card and doorphones are necessary for this feature.
- If you do not answer an incoming doorphone call within 15 or 30 seconds, the call will be cancelled.
- You must program the extensions which can receive calls from each doorphone for the day, night and lunch modes.
- Any extension user can call a doorphone.
- The Call Waiting feature is not available with doorphone calls.
- Doorphone 1 and Doorphone 2 cannot receive calls simultaneously. When one is in use, an extension user cannot have a conversation with the other. This is the same for Doorphone 3 and Doorphone 4.
- Doorphones can also be used for the Room Monitor feature.

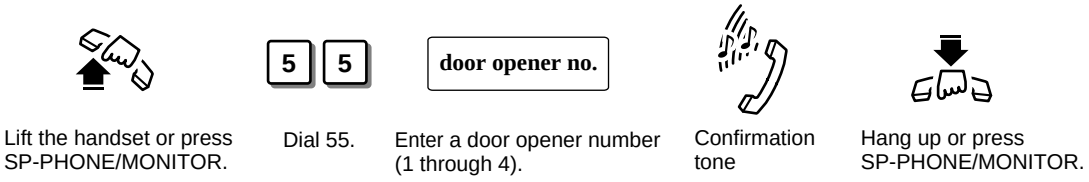
- 1.7 Useful Features, “Room Monitor”
- See the Installation Manual, Section 3, “Doorphone Call”.

Door Opener

Allows you to unlock the door from your telephone.
Up to 4 door openers can be connected to the system.

To unlock the door from an assigned extension

Any Telephone

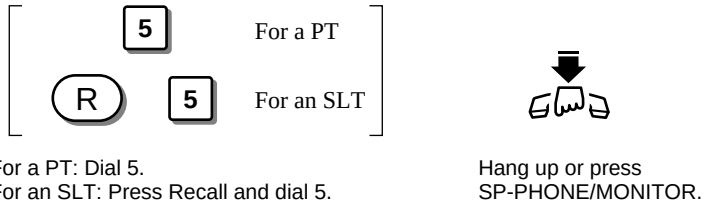


Lift the handset or press SP-PHONE/MONITOR. | Dial 55. | Enter a door opener number (1 through 4). | Confirmation tone | Hang up or press SP-PHONE/MONITOR.

- The door is left unlocked for 5 seconds (default).

To unlock the door while talking to the doorphone

PT and SLT



For a PT: Dial 5.
For an SLT: Press Recall and dial 5.

Hang up or press SP-PHONE/MONITOR.

- The door is left unlocked for 5 seconds (default).

- An optional doorphone/door opener card is necessary for this feature.
- If you dial 5 again while the door is open, the door will stay open for another 5 seconds (default).
- You can program the extensions which can open the doors for the day, night and lunch modes.
- You can modify the door opener timer in System Programming.
- The door opener will open the door, even if a doorphone is not installed.

- See the Installation Manual, Section 3, “Door Opener”.

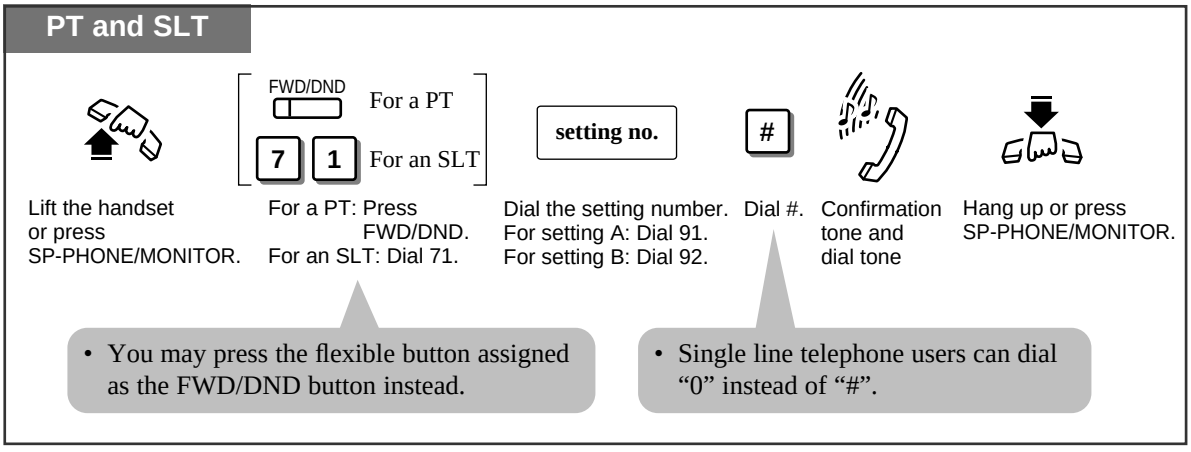
Voice Mail Integration for KX-TVP100

Allows you to use a Panasonic Voice Processing System (KX-TVP100) to forward your calls to a mailbox in the system. A caller can leave a message in your mailbox. If you use a proprietary telephone which has a MESSAGE button, the button light will turn on to let you know you have messages. If you use a single line telephone, dial tone 3 will let you know you have messages when you go off-hook.
If this feature is enabled, the system automatically sends the Follow-on ID to the Voice Mail Port before connecting the caller. You must choose one of the following two settings for the Follow-on ID format.

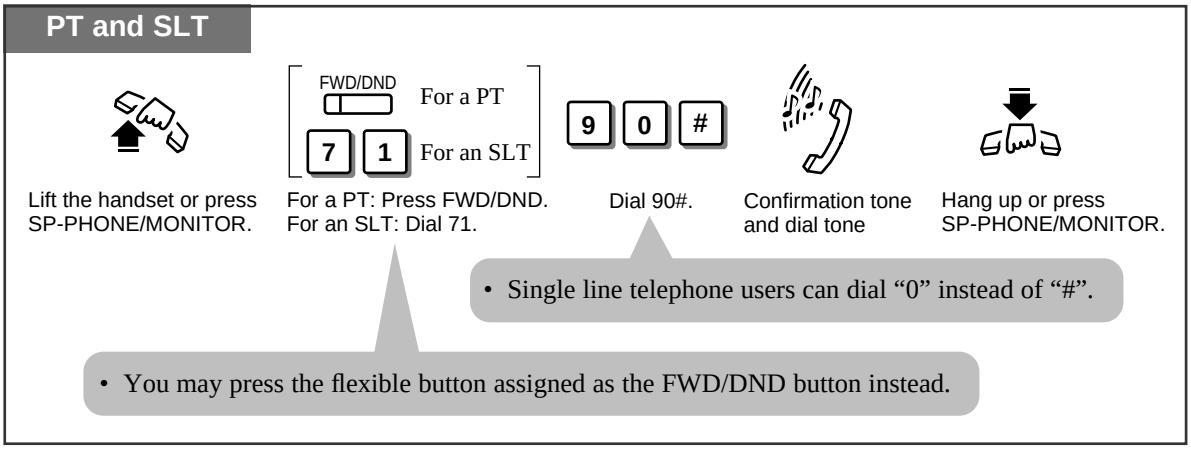
Setting A: only sends the extension number to the Voice Mail Port.
Setting B: sends "#6" followed by the extension number. "#6" is used by a Panasonic KX-TVP100 to force the VPS port into voice mail service.

The setting depends on the format required by your voice processing system.

Setting


PT and SLT
FWD/DND
For a PT
7
1
For an SLT
setting no.
#
Lift the handset or press SP-PHONE/MONITOR.
For a PT: Press FWD/DND. For an SLT: Dial 71.
Dial the setting number. For setting A: Dial 91. For setting B: Dial 92.
Dial #.
Confirmation tone and dial tone
Hang up or press SP-PHONE/MONITOR.
• You may press the flexible button assigned as the FWD/DND button instead.
• Single line telephone users can dial "0" instead of "#".

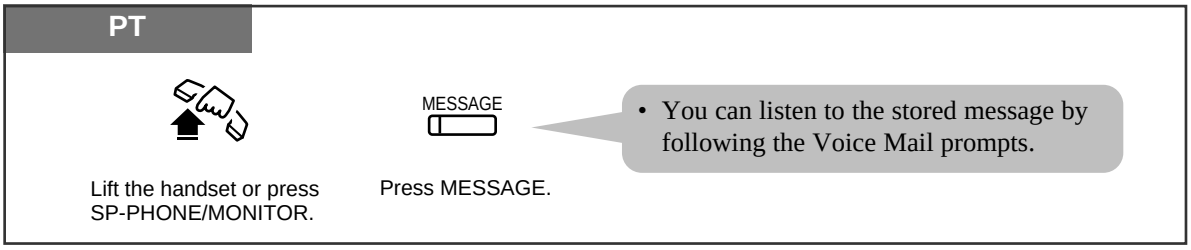
Cancelling


PT and SLT
FWD/DND
For a PT
7
1
For an SLT
9
0
#
Lift the handset or press SP-PHONE/MONITOR.
For a PT: Press FWD/DND. For an SLT: Dial 71.
Dial 90#.
Confirmation tone and dial tone
Hang up or press SP-PHONE/MONITOR.
• Single line telephone users can dial "0" instead of "#".
• You may press the flexible button assigned as the FWD/DND button instead.

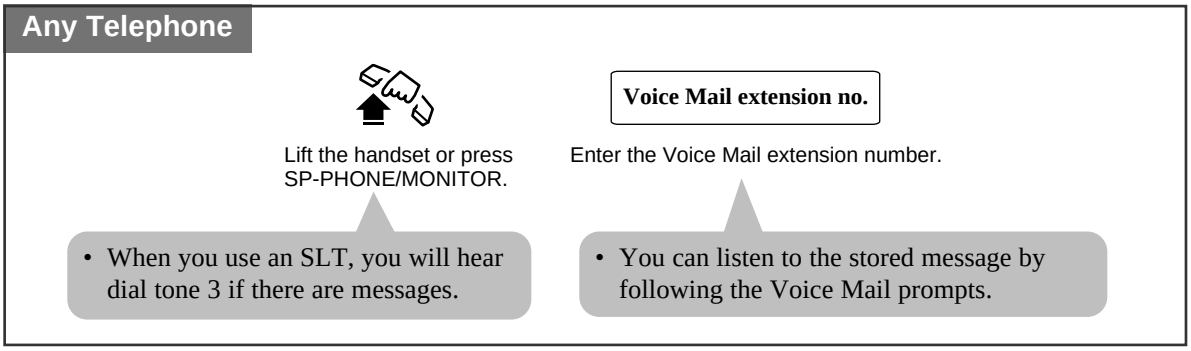
Listening to a stored message

You can listen to the messages stored in your mailbox easily. There are two operations to play back messages.

Using the Message Waiting (MESSAGE) button


PT
MESSAGE
• You can listen to the stored message by following the Voice Mail prompts.
Lift the handset or press SP-PHONE/MONITOR.
Press MESSAGE.

By manual dialling


Any Telephone
Voice Mail extension no.
Lift the handset or press SP-PHONE/MONITOR.
Enter the Voice Mail extension number.
• When you use an SLT, you will hear dial tone 3 if there are messages.
• You can listen to the stored message by following the Voice Mail prompts.

- To forward your calls to your mailbox by the Call Forwarding feature, you have to set “Call Forwarding — All Calls” or “Call Forwarding — Busy or No Answer”.
  The setting is as follows.
  [Lift receiver] [FWD/DND or 71] [91# or 92#] (after hearing a confirmation tone and dial tone) [FWD/DND or 71] [1 (All Calls) or 2 (Busy or No Answer)] [Voice mail extension number] [#] [Replace receiver]
  The cancelling is as follows.
  [Lift receiver] [FWD/DND or 71] [90#] (after hearing a confirmation tone and dial tone) [FWD/DND or 71] [0#] [Replace receiver]

PT
- A flexible key can be assigned as the FWD/DND button.

SLT
- You will hear dial tone 3 if there are messages in your mailbox when you lift your receiver. When you access voice mail, you have to listen to all of the new messages. If you do not listen to all of the messages, dial tone 3 will be eliminated and you will not know there are messages in your mailbox the next time you lift your receiver.

- 1.2 Proprietary Telephone Settings, “Customising the Buttons on Your Telephone”, FWD/DND Button, Restoring the Message Button
- 1.6 Before Leaving Your Desk “Forwarding a Call (Call Forwarding)”, All Calls, Busy or No Answer
- See the Installation Manual, Section 3, “Intercept Routing”.
- See the Installation Manual, Section 3, “Voice Mail Integration for KX-TVP100”.

Calling Using Your Privileges from Another Extension (Walking COS)

Allows you to use your calling privileges (Call Barring — Class of Service) at another extension. You may override restrictions which may be set at the extension.

Making a call

Any Telephone

At another extension

Lift the handset or press SP-PHONE/MONITOR.

7 ✳

Dial 7✳.

extension password

Dial your extension password.

extension no.

Enter your extension number.

#

Dial #.

Confirmation tone and dial tone

phone no.

Enter the phone number.

- You must dial a line access code (9, 0 or 81 through 86) or press the line key when calling an external party.

- Call Barring Class of Service (COS) is used to define the feature. Each extension is assigned a Call Barring COS number.

SLT

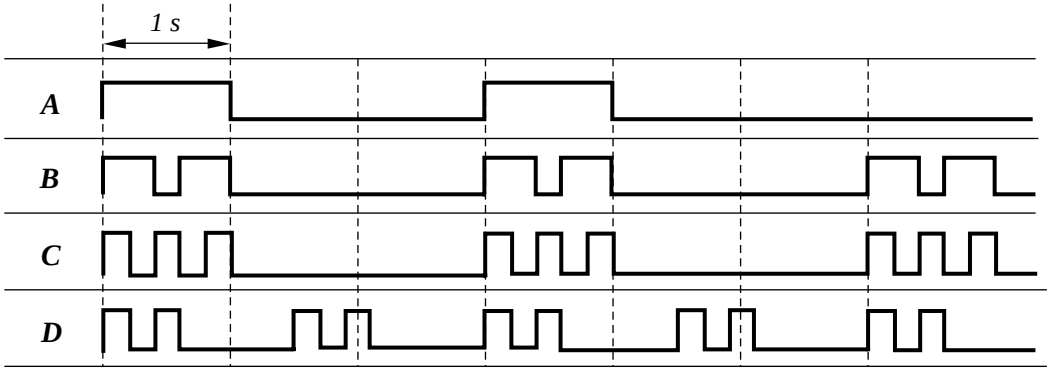
- A rotary telephone cannot use this feature.

- 1.8 Operator/Manager Service Features, “Extension Password Set (Manager only)”
- See the Installation Manual, Section 3, “Walking COS”.

Ringing Pattern Selection

A different ringing pattern is used to distinguish intercom calls from incoming outside calls.

- You can select the ringing pattern as follows in System Programming.
  — Exchange line: 3 patterns (A, B or C)
  — Extension: 3 patterns (A, B or C)
  — Doorphone: 4 patterns (A, B, C or D)



- 2.1 Tone / Ring Tone List
- See the Installation Manual, Section 3, “Ringing Pattern Selection”.

Distinctive Dial Tones

A distinctive dial tone will be heard from the handset if the extension user has previously activated a certain feature.

Dial Tone 1: Ordinary dial tone

Dial Tone 2: When any of the following features are activated.
- Absent Message Capability
- Back Ground Music (BGM) (only a proprietary telephone)
- Call Forwarding
- Call Pickup Deny
- Data Line Security
- Do Not Disturb (DND)
- Electronic Extension Lockout
- Message Waiting (only a proprietary telephone)
- Pickup Dialling (only a single line telephone)
- Remote Extension Lock Control
- Timed Reminder

Dial Tone 3: When performing Account Code Entry and answering a Timed Reminder call. Also sent when going off-hook with an SLT which has a message in a Voice Processing System.

- 2.1 Tone / Ring Tone List
- See the Installation Manual, Section 3, “Distinctive Dial Tones”.

Power Failure Transfer

During a power failure, each of the following exchange lines will be connected to an assigned extension.

Exchange line 1: extension port 01
Exchange line 4: extension port 09

- During a power failure, all features cannot be used except for incoming and outgoing outside calls from extension ports 01 and 09.
- If extension ports 01 and 09 are connected to proprietary telephones, disconnect the units and connect single line telephones.

- See the Installation Manual, Section 3, “Power Failure Transfer”.

Lockout

If one party in a conversation goes on-hook, both parties will be disconnected from the speech path automatically. Reorder tone is sent to the off-hook party before they are disconnected. No operation is necessary.

1.8 Operator / Manager Service Features

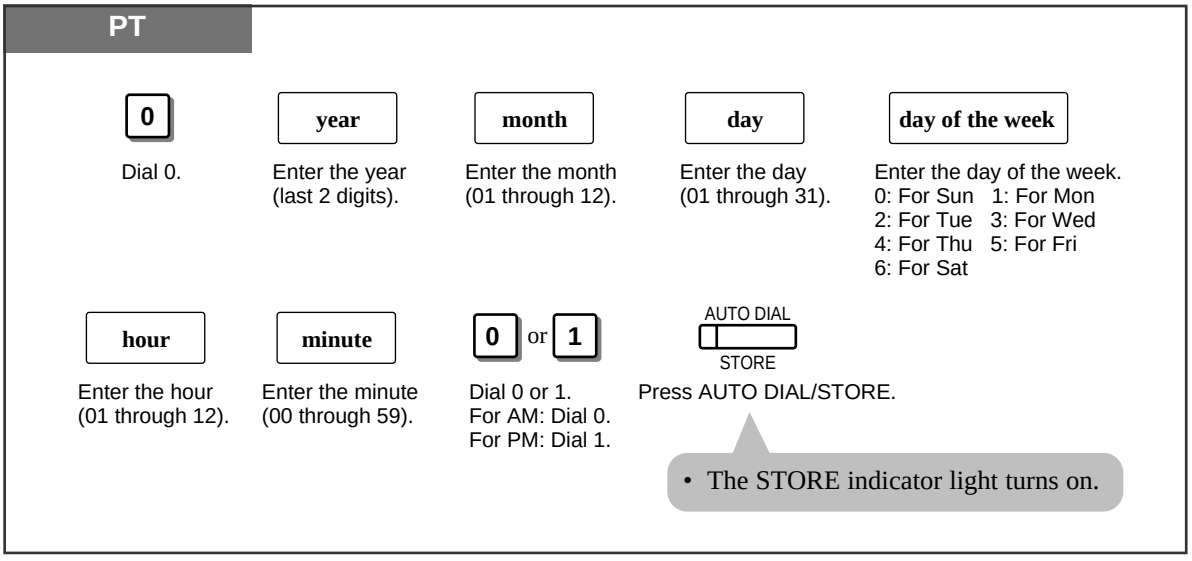
The system supports one operator and one manager. Any extension can be appointed as the operator and extension port 01 is appointed as the manager. System Programming is required to assign the operator. They can perform the following features.

1) Date and Time Setting
2) Electronic Extension Lockout — CANCEL ALL
3) Timed Reminder, Remote (Wake-Up Call)
4) Outgoing Message (OGM)
5) Remote Extension Lock
6) Time (Day/Night/Lunch) Service Setting
7) Extension Password Set (Manager only)

Date and Time Setting

When the current time setting is wrong, you can adjust it by the following procedure.

Setting



- Be sure the handset is on the cradle and the SP-PHONE button is off.
- To program, set the MEMORY switch on the proprietary telephone to “PROGRAM”.
- After programming, return the MEMORY switch to the “SET” position.

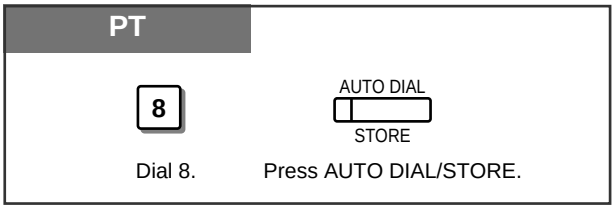
- See the Installation Manual, Section 3, “Date and Time Setting”.

Electronic Extension Lockout — CANCEL ALL

You can cancel Electronic Extension Lockout at all extensions.

Setting

PT



- Be sure the handset is on the cradle and the SP-PHONE button is off.
- To program, set the MEMORY switch on the proprietary telephone to “PROGRAM”.
- After programming, return the MEMORY switch to the “SET” position.

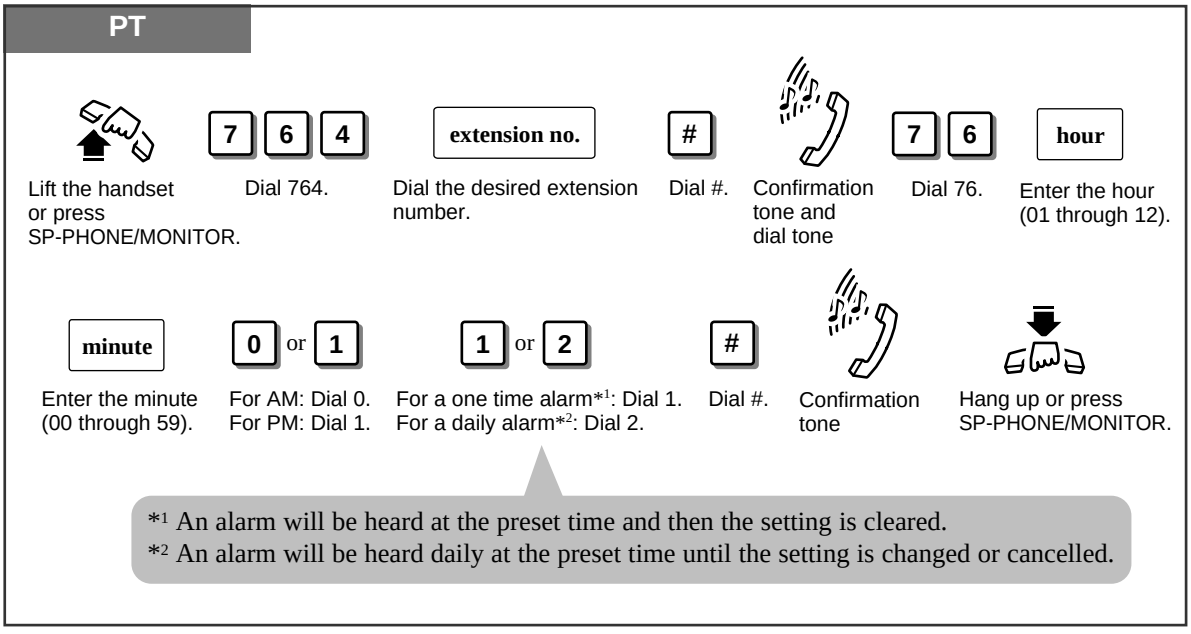
- See the Installation Manual, Section 3, “Extension Lock”.

Timed Reminder, Remote (Wake-Up Call)

The operator or manager can remotely set or cancel the Timed Reminder at a particular extension.

Setting

PT



*1 An alarm will be heard at the preset time and then the setting is cleared.
*2 An alarm will be heard daily at the preset time until the setting is changed or cancelled.

Cancelling

PT

Lift the handset or press SP-PHONE/MONITOR.

7 6 4

Dial 764.

extension no.

Dial the desired extension number.

#

Dial #.

Confirmation tone and dial tone

7 6 2 #

Dial 762#.

Confirmation tone

Hang up or press SP-PHONE/MONITOR.

Checking the time setting (with a display PT only)

PT

Lift the handset or press SP-PHONE/MONITOR.

7 6 4

Dial 764.

extension no.

Dial the desired extension number.

#

Dial #.

Confirmation tone and dial tone

7 6 3 #

Dial 763#.

Hang up or press SP-PHONE/MONITOR.

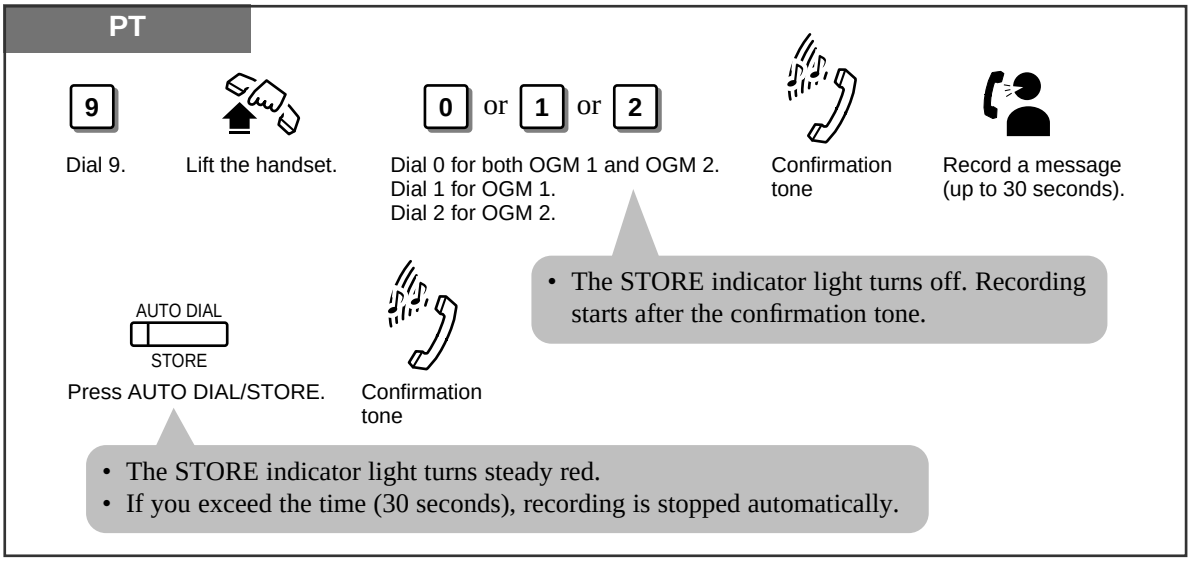
- 1.7 Useful Features, “Alarm Setting (Timed Reminder)”
- See the Installation Manual, Section 3, “Timed Reminder”.

Outgoing Message (OGM)

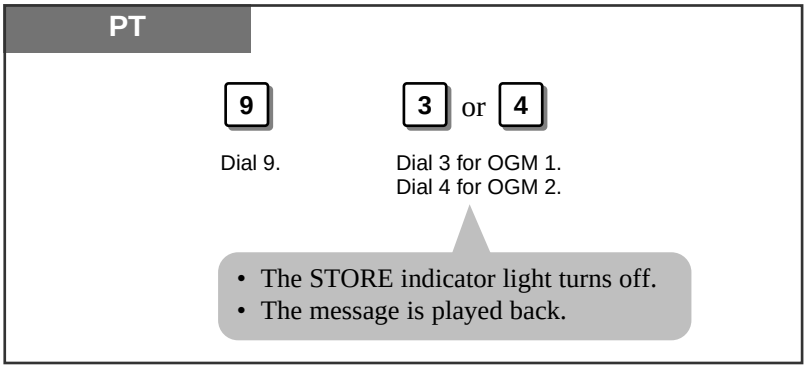
The operator or manager can record or play back the outgoing message.
This is played when a caller accesses the DISA or UCD feature.
Two Outgoing Messages (OGM 1 and OGM 2) are available for DISA 1, DISA 2, UCD and UCD-END.

To program, set the MEMORY switch on the proprietary telephone to “PROGRAM”.

Recording a message


PT
9
Dial 9.
Lift the handset.
0 or 1 or 2
Dial 0 for both OGM 1 and OGM 2.
Dial 1 for OGM 1.
Dial 2 for OGM 2.
Confirmation tone
Record a message (up to 30 seconds).
• The STORE indicator light turns off. Recording starts after the confirmation tone.
AUTO DIAL
STORE
Press AUTO DIAL/STORE.
Confirmation tone
• The STORE indicator light turns steady red.
• If you exceed the time (30 seconds), recording is stopped automatically.

Playing back a message



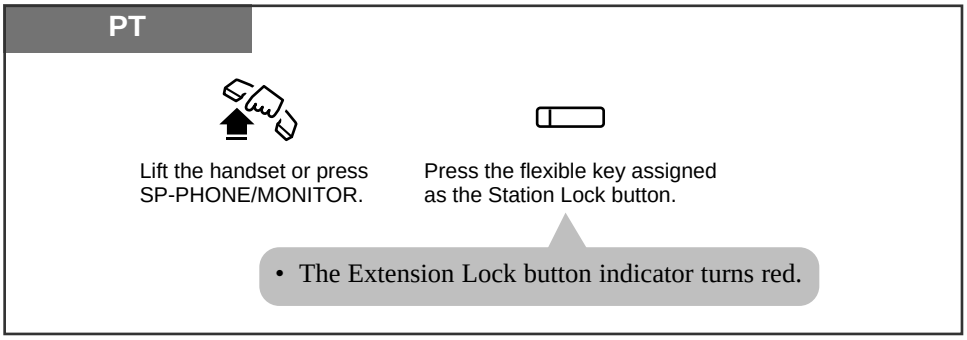
- Be sure the handset is on the cradle and the SP-PHONE button is off.
- After programming, return the MEMORY switch to the “SET” position.

- See the Installation Manual, Section 3, “Direct Inward System Access (DISA)”.
- See the Installation Manual, Section 3, “Uniform Call Distribution (UCD)”.
- See the Installation Manual, Section 3, “Outgoing Message (OGM)”.

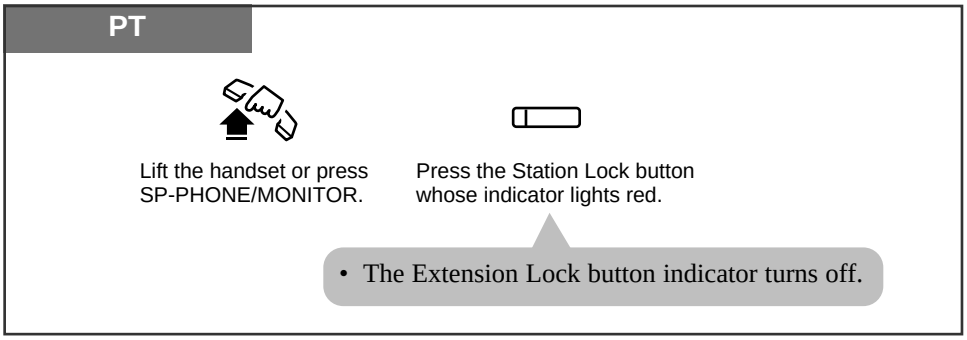
Remote Extension Lock

The operator or manager can remotely lock or unlock a particular extension. You can prohibit outside calls.

Locking


PT
Lift the handset or press SP-PHONE/MONITOR.
Press the flexible key assigned as the Station Lock button.
• The Extension Lock button indicator turns red.

Unlocking


PT
Lift the handset or press SP-PHONE/MONITOR.
Press the Station Lock button whose indicator lights red.
• The Extension Lock button indicator turns off.

- This feature overrides the “Electronic Extension Lockout” feature. If “Electronic Extension Lockout” has already been set by the extension user and this feature is set afterwards, the user cannot unlock their extension. Only the operator or manager can cancel the lock.
- Extension passwords must be assigned to the operator and manager extensions beforehand.
- An extension user can make a call at the locked extension depending on system programming. System programming determines which barring level applies to a call at the locked extension.

- 1.6 Before Leaving Your Desk, “Locking Your Telephone (Electronic Extension Lockout)”
- See the Installation Manual, Section 3, “Extension Lock”.

Time (Day/Night/Lunch) Service Setting

This system supports the day, night and lunch modes. The system operation for originating and receiving calls can be different in the day, night and lunch modes. Call barring can be programmed to prevent unauthorised calls for each mode.

Changing Day, Night or Lunch mode in manual or automatic mode

PT

Lift the handset or press SP-PHONE/MONITOR.

7 8 1 # or [ ] For Manual-Day mode
7 8 2 # or [ ] For Manual-Night mode
7 8 3 # or [ ] For Manual-Lunch mode

For manual-day mode: Dial 781# or press the DSS button assigned as the Day button.
For manual-night mode: Dial 782# or press the DSS button assigned as the Night button.
For manual-lunch mode: Dial 783# or press the DSS button assigned as the Lunch button.

Confirmation tone and dial tone

Hang up or press SP-PHONE/MONITOR.

- The assigned button indicator turns on.

Cancelling the manual Day, Night or Lunch mode and returning to the automatic mode

PT

Lift the handset or press SP-PHONE/MONITOR.

7 8 0 #

Dial 780#.

Confirmation tone and dial tone

Hang up or press SP-PHONE/MONITOR.

Confirming the current mode (with a display PT only)

PT

When the telephone is idle

#

Press #.

- The display shows the current mode for 3 seconds.

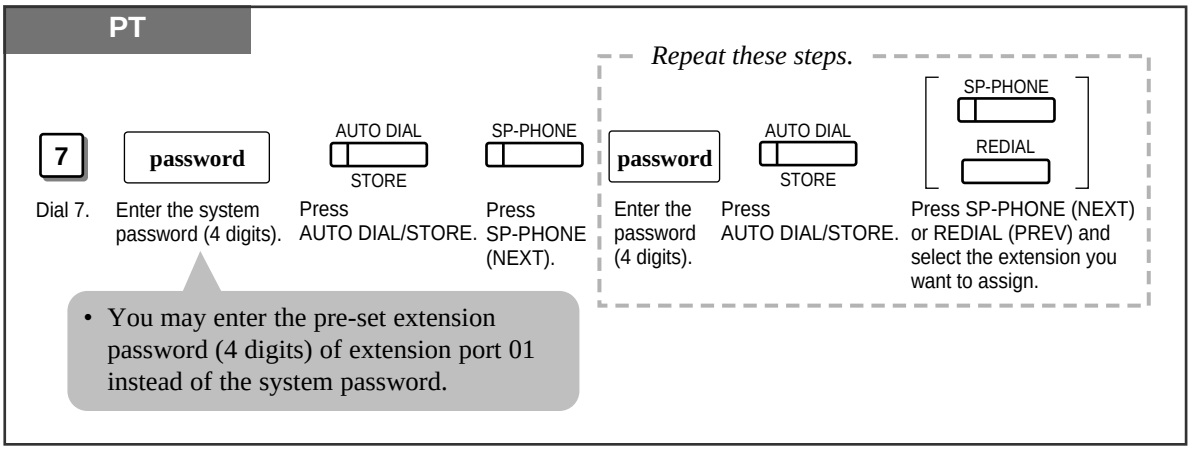
- The day/night/lunch mode can be changed either automatically at a predetermined time (default: 9:00 a.m. for every day, 5:30 p.m. for every night) or manually at any time by System Programming.
- Even if the automatic mode has been selected by System Programming, the operator or manager can change the day, night and lunch modes manually.
- The following programs have separate day, night and lunch programming.
  1) Delayed Ringing Assignment
  2) Door Opener Assignment
  3) Doorphone Ringing Assignment
  4) Flexible Outward Dialling Assignment
  5) Flexible Ringing Assignment
  6) Exchange Line Mode
  7) Call Barring – Class of Service (COS) Assignment
- If the lunch mode is set using feature number 783# in the automatic mode, the mode will not be changed until the lunch mode is cancelled using feature number 780#. The day and night modes are automatically changed at the programmed time even if feature number 780# is not entered.
- Feature number 780# is not accepted in the manual mode.
- One of the day, night or lunch button indicators on the DSS console lights red to display the current mode.
- If the day, night or lunch mode is changed manually when the system is set to automatic mode and the manager starts System Programming, the manual setting will be cancelled after System Programming is completed. It will return to the automatic day, night or lunch mode.

- 1.7 Useful Features, “Doorphone Call”
- 1.7 Useful Features, “Door Opener”
- See the Installation Manual, Section 3, “Direct In Line (DIL)”.
- See the Installation Manual, Section 3, “Call Barring”.
- See the Installation Manual, Section 3, “Time (Day/Night/Lunch) Service”.

Extension Password Set (Manager only)

The manager can assign a password to each extension. The assigned password can be used for the Walking COS feature.

Setting



- Be sure the handset is on the cradle and the SP-PHONE button is off.
- To program, set the MEMORY switch on the proprietary telephone to “PROGRAM”.
- After programming, return the MEMORY switch to the “SET” position.
- The extension number is displayed in the order of the port number when you press the NEXT or PREV button.
- To erase an incorrect entry, press the CLEAR (TRANSFER) button and enter a new number.

- 1.7 Useful Features, “Calling Using Your Privileges from Another Extension (Walking COS)”
- See the Installation Manual, Section 3, “Extension Password/System Password”.
- See the Installation Manual, Section 3, “Walking COS”.

1.9 DSS Console Features

With a Direct Station Selection (DSS) Console, model KX-T7040, you can make or transfer calls and access system features with the touch of a button. The DSS Console must be connected to a Panasonic Advanced Hybrid System and paired with a PT. System Programming is required to designate the extension ports of the DSS Console. With a paired telephone, you can carry out the following operations using the DSS Console.

- Direct access to an extension (Direct Extension Dialling)
- Quick access to an external party (One-Touch Dialling)
- Quick access to a system feature (One-Touch Access for System Features)
- Easy transfer to an extension (Call Transfer)
- Quick access to the day mode (Time (Day/Night/Lunch) Service) (Operator/Manager only)
- Quick access to the night mode (Time (Day/Night/Lunch) Service) (Operator/Manager only)
- Quick access to the lunch mode (Time (Day/Night/Lunch) Service) (Operator/Manager only)
- Quick setting of the Remote Extension Lock Control (Remote Extension Lock Control) (Operator/Manager only)

- The KX-T7040 and Proprietary Telephone (PT) should be placed side by side on your desk.
- A single line telephone cannot be paired with the KX-T7040.
- For System Programming, please refer to the Installation Manual.

Initial Settings

PF buttons are provided with no default settings, while each DSS button has a default setting as follows.

DSS 01–24: extension numbers 201–224
DSS 25–32: no default settings

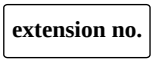
To meet your various needs, DSS buttons can be changed to other function buttons.
Every DSS or PF button can be assigned to another extension number, telephone number or feature number.

- Be sure the handset is on the cradle and the SP-PHONE button is off.
- To program, set the MEMORY switch on the proprietary telephone to “PROGRAM”.
- After programming, return the MEMORY switch to the “SET” position.
- As to the buttons on your DSS Console, please refer to your DSS Console manual.

Extension Number Assignment

You can assign a desired number to a DSS button.

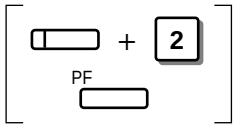
PT and DSS Console

[DSS Console]	[Paired telephone]	[Paired telephone]	[Paired telephone]	
				Repeat these steps to program numbers for other DSS buttons.
Press the desired DSS button.	Dial 1.	Enter the desired extension number.	Press AUTO DIAL/STORE.	

One-Touch Dialling Assignment

You can assign a DSS or PF button as a One-Touch Dialling button. The number can be an extension number or a telephone number. Up to 24 digits can be stored in each memory location.

PT and DSS Console

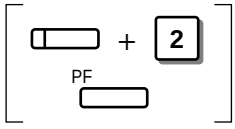
[DSS Console and Paired telephone]	[Paired telephone]	[Paired telephone]	
			Repeat these steps to program numbers for other DSS or PF buttons.
Press the desired DSS button (on the DSS Console) and dial 2 (on the paired telephone), or press the PF button (on the DSS Console).	Enter the desired number.	Press AUTO DIAL/STORE.	

- When you assign an outside phone number, you must enter a line access code first.

One-Touch Access Assignment for System Features

You can assign a desired feature to a DSS or PF button.

PT and DSS Console

[DSS Console and Paired telephone]	[Paired telephone]	[Paired telephone]	
			Repeat these steps to program numbers for other DSS or PF buttons.
Press the desired DSS button (on the DSS Console) and dial 2 (on the paired telephone), or press the PF button (on the DSS Console).	Enter the desired number.	Press AUTO DIAL/STORE.	

- If you wish to access the “Paging — All extensions” feature, enter feature number 330.

Day, Night and Lunch Buttons Assignment (Operator/Manager only)

You can assign a DSS button as a Day, Night or Lunch button. Simply pressing the assigned button sets the day, night or lunch mode.

PT

[DSS Console]	[Paired telephone]	[Paired telephone]
	4 For Day mode 5 For Night mode 6 For Lunch mode	
Press the desired DSS button.	For Day mode: Dial 4. For Night mode: Dial 5. For Lunch mode: Dial 6.	Press AUTO DIAL/STORE.

- See the Installation Manual, Section 3, “Time (Day/Night/Lunch) Service”.

Extension Lock Button Assignment (Operator/Manager only)

You can assign the Extension Lock button to a DSS button for the remote extension lock control feature.

PT and DSS Console

[DSS Console]	[Paired telephone]	[Paired telephone]	[Paired telephone]	
	7	extension no.		Repeat these steps to program numbers for other DSS buttons.
Press the desired DSS button.	Dial 7.	Enter the desired extension number.	Press AUTO DIAL/STORE.	

To clear a button

PT and DSS Console

[DSS Console]	[Paired telephone]	[Paired telephone]
	2	
Press the DSS or PF button which you wish to cancel.	Dial 2.	Press AUTO DIAL/STORE.

- The number is cancelled.

- DSS buttons can be changed to any of the following function buttons.
  a) *Another* DSS Button (Every DSS button can be assigned to another extension number.)
  b) One-Touch Dialling Button
  c) Day Button (Operator/Manager only)
  d) Night Button (Operator/Manager only)
  e) Lunch Button (Operator/Manager only)
  f) Extension Lock Button (Operator/Manager only)
- PF buttons can be changed to One-Touch Dialling buttons.
- When the STORE button is pressed after programming, you will hear beep tones as follows.
  — 1 beep: The entry is different from the one that was stored previously.
  — 2 beeps: The entry is the same as the previously stored one.
- You can check the stored data in the following way.
  1. Set the MEMORY switch to "PROGRAM".
  2. Press the desired button while on-hook.

  The data will be displayed. After checking the data return the MEMORY switch to the "SET" position.

- 1.2 Proprietary Telephone Settings, "Customising the Buttons on Your Telephone",
  DSS Button,
  One-Touch Dialling Button

Direct Extension Dialling

An extension can be called and accessed by simply pressing a DSS button. The BLF shows if the extension is engaged.

PT and DSS Console

[Paired Telephone]	[DSS Console]
Lift the handset or press SP-PHONE/MONITOR.	Press the desired DSS button.

- By System Programming you can press a DSS button directly to make an intercom call without going off-hook.

One-Touch Dialling

The stored number is dialled automatically by pressing a programmed DSS or PF button.

PT and DSS Console

[Paired Telephone]	[DSS Console]
Lift the handset or press SP-PHONE/MONITOR.	Press the desired DSS or PF button.

One-Touch Access for System Features

You can access system features by pressing a programmed DSS or PF button.

PT and DSS Console

[Paired Telephone]

Lift the handset or press SP-PHONE/MONITOR.

[DSS Console]

Press the desired DSS or PF button.

Call Transfer

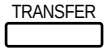
A call can be transferred to an extension using a DSS button.

Without Transfer

PT and DSS Console

During a conversation

[Paired Telephone]



Press TRANSFER.

[DSS Console]

Press the desired DSS button.

With Transfer

An outside call can be transferred to an extension using a one-touch operation. The One-Touch Transfer function must be set through System Programming.

PT and DSS Console

During a conversation

[DSS Console]

Press the desired DSS button.

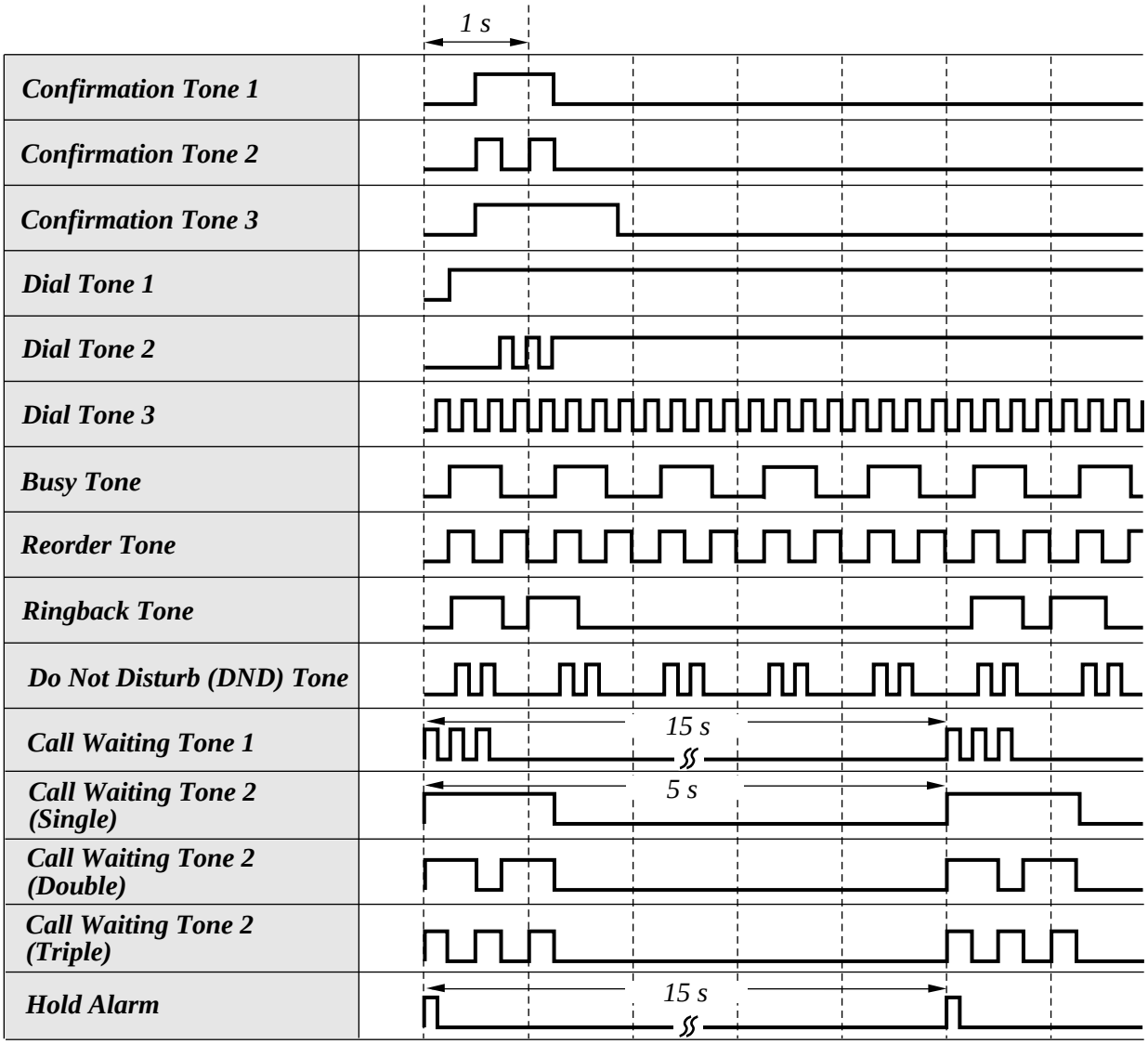
- The other party is placed on hold and the destination extension is called.

Section 2

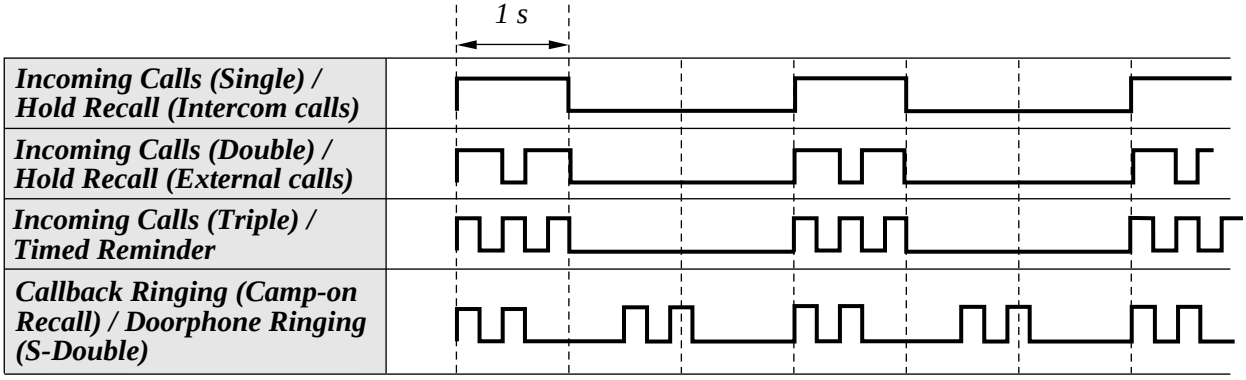
Appendix

2.1 Tone / Ring Tone List

< TONE >



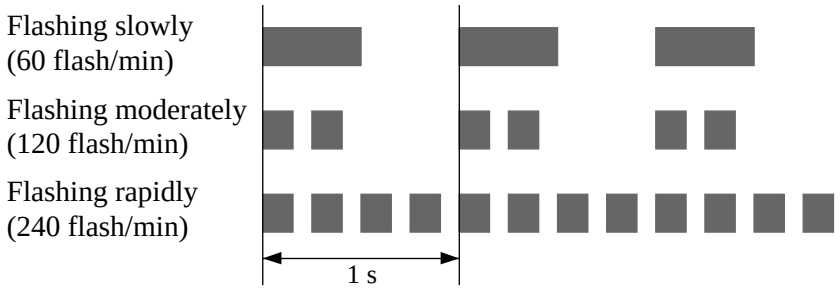
< RING TONE >


1 s
Incoming Calls (Single) / Hold Recall (Intercom calls)
Incoming Calls (Double) / Hold Recall (External calls)
Incoming Calls (Triple) / Timed Reminder
Callback Ringing (Camp-on Recall) / Doorphone Ringing (S-Double)

2.2 LED Indication

The Light Emitting Diode (LED) indicates the line conditions using lighting patterns.

Flashing light patterns



LED Indication on the INTERCOM Button

The table below shows the lighting patterns for intercom line conditions.

INTERCOM button	Intercom Line Condition
Off	Idle
Green On	You are using the line.
Flashing Green Slowly	You are holding a line.
Flashing Green Moderately	Intercom call exclusive hold
Flashing Green Rapidly	Incoming intercom/doorphone call

LED Indication on the Line Key

The table below shows the lighting patterns for exchange line conditions.

Line Key	Exchange Line Condition
Off	Idle
Green On	You are using the line.
Flashing Green Slowly	You are holding a line.
Flashing Green Moderately	You are holding a line on exclusive hold.
Flashing Red Rapidly	Incoming call
Red On	Another person is using the line.
Flashing Red Slowly	Another person is holding the line.*

— Item with a * is only available on a Single Exchange Line key.

BLF on DSS Button

The Busy Lamp Field (BLF) indicator button is red when the corresponding extension is busy. This is available for flexible line keys assigned as DSS buttons on proprietary telephones and DSS buttons on the DSS console.

2.3 Feature Number List

Feature Numbers and Additional Required Digits

Feature	Number	Additional Required Digits
Absent Message Capability set / cancel	75	1–6 / 0 + #
Account Code Entry for an SLT	49 or ✳✳	Account code
Call Forwarding set / cancel	71	1–3 + desired number / 0 + #
Call Forwarding — Follow Me set / cancel	71	5 / 8 + EXTN. (extension no.) + #
Call Hold (Hold Mode 2 or 3) for an SLT	50	
Call Hold, Retrieve outside call / intercom call	53 / 5	CO (exchange line no.) / EXTN.
Call Park / Call Park Retrieve	36 / 56	0–9
Call Pickup, Directed	4	EXTN.
Call Pickup, Group	40	
Call Pickup Deny set / cancel	72	1 / 0 + #
Call Retrieve from TAM	4*[1]	
Call Waiting set / cancel for extensions	732	1 / 0 + #
Call Waiting set / cancel for exchange lines	731	1 / 0 + #
Conference (5-party)	22✳	phone no. + CONF
Data Line Security set / cancel	730	1 / 0 + #
Do Not Disturb (DND) set / cancel	71	4 / 0 + #
Doorphone Call calling / door open	31 / 55	1–4
Electronic Extension Lockout set	77	0000–9999 twice + #
Electronic Extension Lockout cancel	77	0000–9999 + #
Executive Busy Override Deny set / cancel	733	0 / 1 + #
Extension Number	200–299	
External Feature Access	6	
Log-In / Log-Out	736	0 / 1 + #
Message Waiting set / cancel	70	(1 + EXTN.) / (2 + EXTN.) + #
Message Waiting cancel all messages	70	0 + #
Operator Call	0	
Outward Dialling — Line Access, Automatic — Line Access, Trunk Group	 9 8	 1–6

*[1] Dial after dialling the TAM's extension number and hearing busy tone.

2.3 Feature Number List

Feature	Number	Additional Required Digits
Paging — All extensions & External	33	✳ or 9
Paging — External	34	
Paging — All extensions / Group	33	0 / 1–8
Paging — Answer	43	
Paging Deny set / cancel	734	1 / 0 + #
Personal Speed Dialling	1✳ or #	0–9
Personal Speed Dialling store	2✳	(0–9) + phone no. + #
Personal Speed Dialling confirm	3✳	0–9 + #
Pickup Dialling (Hot Line) assign / set / cancel for an SLT	74	2 + phone no. / 1 / 0 + #
Redial, Last Number for an SLT	## or 80	
Room Monitor set / cancel	735	1 / 0 + #
Extension Feature Clear	79	#
System Speed Dialling for an SLT	✳	00–99
Timed Reminder set	76	hhmm*2 + (0 / 1) + (1 / 2) + #
Timed Reminder cancel / confirm	76	2 / 3 + #
Timed Reminder, Remote cancel	764	EXTN. + # + 762#
Timed Reminder, Remote check	764	EXTN. + # + 763#
Timed Reminder, Remote set	764	EXTN. + # + 76 + hhmm*2 + (0 / 1) + (1 / 2) + #
Time Service set / cancel	78	1–3 / 0 + #
Voice Mail Integration set / cancel	719	1–2 / 0 + #
Walking COS	7✳	Extension password + EXTN. + #

*2 hhmm
hh: hour (01 – 12) / mm: minute (00 – 59)

2.3 Feature Number List

Feature Numbers

FEATURE	NUMBER
While a busy tone is heard	
Automatic Callback Busy (Camp-On)	6
Busy Extension Signalling	2
Executive Busy Override	3
While a Do Not Disturb tone is heard	
Do Not Disturb (DND) Override	2
During a call or while talking	
Alternate Calling — Ring/Voice	✳
Conference	3
Door open	5
Pulse to Tone Conversion	✳#
When the telephone is on-hook	
Background Music (BGM) on/off	1
Time (Day/Night/Lunch) mode display	#
EXTN. and extension name/ Date (day/month) and time display/ date (month/day/year/day of the week) display changing	✳

- When "✳" or "#" are included in a feature number, users with rotary telephones cannot access the feature except for the ones which can use "0" instead of "#" .

2.4 Display Example

Due to the Trilingual Selection Feature, you can select the display in English, Spanish or Portuguese by System Programming. The left part is the English display and the right part is the Spanish display.

English Display	Spanish Display	Description
Set Time & Date	Fijar Hora/Fecha	Factory setting. The system clock is not working properly.
1 Jan 12:00AM 1 Jan 20:00	1 Ene 12:00AM 1 Ene 20:00	The current date and time using a 12-hour clock. The current date and time using a 24-hour clock. — Pressing "✳" while on-hook alternates between this display and the following two displays.
Jan 1,1998 Thu	Ene 1,1998 JUE	The current date and day of the week.
223: 223:Tony Viola	223: 223:Tony Viola	Making or receiving an intercom call. Also, displayed while on-hook. The extension name is not assigned. Making or receiving an intercom call or called by "Camp-On" (intercom recall). Also, displayed while ringing. The extension name is assigned. Confirming key programming on a DSS or MESSAGE button.
201: Busy	201: Ocupada	The destination extension is busy.
9-01344-862072P&	9-01344-862072P&	Confirming the key programming on the REDIAL, SAVE, or One-Touch Dialling button.
→223:Tony Viola	→223:Tony Viola	Making or receiving an intercom call to or from a forwarded extension. The extension name is assigned.
→201: Busy	→201: Ocupada	The call is forwarded to a busy extension.
Alarm 10:15AM	Alarma 10:15AM	The "Timed Reminder" setting is completed or a "Timed Reminder" call was received (1-time mode). Confirming the "Timed Reminder" programming.
Alarm 10:15AM✳	Alarma 10:15AM✳	The "Timed Reminder" setting is completed or a "Timed Reminder" call was received (everyday mode). Confirming the "Timed Reminder" programming.
Alarm Cancel	Alarma Desact	"Timed Reminder" has been cancelled.
Alarm Not Stored	Alarma No Fijada	Confirming "Timed Reminder" programming when it is not stored.
At Ext 201	En la Ext 201	Absent Message 3.

2.4 Display Example

English Display	Spanish Display	Description
Back at 11:00AM	Regreso 11:00AM	Absent Message 4.
BGM off	Musica Desact	Back Ground Music has been turned off.
BGM on	Musica Ambiental	Back Ground Music has been turned on.
Busy	Ocupado	The doorphone or external pager called is in use.
Busy Ovrde Allow	Intrmision Permt	“Executive Busy Override Deny” has been turned off.
Busy Ovrde Deny	Intrmision NEG.	“Executive Busy Override Deny” has been turned on.
C.Pickup Allow	Permite Recoger	“Call Pickup Deny” has been turned off.
C.Pickup Deny	Recoger Negado	“Call Pickup Deny” has been turned on.
Call on CO 1	Sonando LN 1	An exchange line is ringing at your extension.
Call Prked at 1	Estacionada 1	A call has been parked.
Callback All COs	Llamar Todas LN	Callback when free has been set for the first available exchange line.
Callback CO 1	Llamar a LN 1	Callback when free has been set for line 1.
Callback CO G1	Llamar a LN G1	Callback when free has been set for trunk group 1.
Callback Ext 201	Llamar a Ext 201	Callback when free has been set for extension 201.
CO 1	LN 1	An idle exchange line is selected.
CO 1 0:01’15	LN 1 0:01’15	The duration of an incoming call.
CO 1 & CO 2	LN 1 Y LN 2	A Conference with two exchange lines.
CO 3 Free	LN 3 Libre	Called by Callback when free (Exchange line recall).
Conference	Conferencia	Confirming key programming on the Conference button.
CO in Use	LN en Uso	The selected exchange line is busy.
CO Not Assigned	LN No Asignada	The desired exchange line is not available (not assigned).
CW(CO) Off	LE(LN) Desact	“Call Waiting” disabled for outside calls.
CW(CO) On	LE(LN) Activa	“Call Waiting” enabled for outside calls.
CW(Ext) Off	LE(Ext) Desact	“Call Waiting” disabled for intercom calls.
CW(Ext) On	LE(Ext) Activa	“Call Waiting” enabled for intercom calls.
Data Mode Off	Modo Data Off	“Data Line Security” is turned off.
Data Mode On	Modo Data Act	“Data Line Security” is turned on.
Day Mode	Modo Dia	Day mode status. — “Time (Day/Night/Lunch) Service”
Do Not Disturb	No molester	Confirming the key programming on the FWD/DND button. “Do Not Disturb (DND)” has been set.

2.4 Display Example

English Display	Spanish Display	Description
D - Opener 1-On	Abrepuerta 1-Act	Door 1 released
Door Phone 1	Interfono 1	Making or receiving a doorphone call.
Ext201 & CO 1	Ext201 Y LN 1	Conference with an extension and exchange line.
Ext201 & Ext202	Ext201 Y Ext202	Conference with two extensions.
Enter ACCNT Code	Entrar Codigo	Pressing the FWD/DND or PAUSE button. — "Account Code Entry"
Ext Data Clear	Borrar Data Ext	"Extension Feature Clear" completed.
External Page	Voceo Externo	"Paging — External" accessed.
FWD(ALL) All COs	DSV(Todas) a LN	"Call Forwarding — to Exchange Line" set. Confirming the key programming on the FWD/DND button.
FWD (All) CO G1	DSV(Todas) GLN 1	"Call Forwarding — to Exchange Line" (- to trunk group) set. Confirming the key programming on the FWD/DND button.
FWD(ALL) Ext201	DSV(Todas)Ext201	"Call Forwarding — All Calls" set. Confirming the key programming on the FWD/DND button.
FWD(B/NA) Ext201	DSV(O/NC) Ext201	"Call Forwarding — Busy or No Answer" set. Confirming the key programming on the FWD/DND button.
FWD(From) Ext201	DSV(desde)Ext201	"Call Forwarding — Follow Me" set.
FWD/DND Cancel	Cancela DSV/No M	"Call Forwarding" or "Do Not Disturb (DND)" cancelled.
FWD V.M. Off	DSV V.M. Off	"Call Forwarding to Voice Mail" cancelled.
FWD V.M. On	DSV V.M. Act	"Call Forwarding to Voice Mail — setting A" set.
FWD V.M.(#6) On	DSV V.M.(#6) On	"Call Forwarding to Voice Mail — setting B" set.
Gone Home	Se Fue a Casa	Absent Message 2.
Group Log In	Entrada de Grupo	Your extension is logged into the hunt group.
Group Log Out	Salida de Grupo	You are logged out of the hunt group.
In a Meeting	Estoy en Reunion	Absent Message 6.
Locked : 1234	Bloqueada: 1234	"Electronic Extension Lockout" is set.
Lunch Mode	Modo Almuerzo	Lunch mode status. — "Time (Day/Night/Lunch) Service"
Message Cancel	Mensaje Desact	Absent Message cancelled.

2.4 Display Example

English Display	Spanish Display	Description
MW at Ext 201	ME en Ext 201	“Message Waiting” has been left at extension 201.
MW Not Accepted	ME No Aceptado	The “Message Waiting” setting was not accepted.
MW Cancelled	ME Cancelado	“Message Waiting” cancelled.
Night Mode	Modo Nocturno	Night mode status. — “Time (Day/Night/Lunch) Service”
No Held Call	No Retenidas	There is no held call when attempting to retrieve a call on hold or parked call.
No Incoming Call	No Entrante	There is no incoming call when trying to pick up a call.
No Page	No Hay Voceo	When trying to answer a page, there is no call or someone has already answered the page.
Not Valid	No Valido	Operation not permitted.
Out Until 12/12	Fuera has 12/12	Absent Message 5.
Paging All	Voceo a Todos	“Paging — All extensions & External” accessed.
Paging All Ext	Voceo Todas Ext	“Paging — All extensions” accessed.
Paging Allow	Voceo Permitido	“Paging — Deny” cancelled.
Paging Deny	Voceo Negado	“Paging — Deny” set.
Paging Group 1	Voceo Grupo 1	“Paging — Group” accessed.
Park at 1 N/A	Estacio. 1 N/A	The “Call Park” location is in use.
PITS-PGM NO? →	Programa NO? →	Extension Programming mode.
PSD Set 1	Persona 1	“Personal Speed Dialling” is set.
PSD 1 Not Stored	No Grabado	Confirming the Personal Speed Dialling number.
RCL: Ext 201	RCL: Ext 201	Called by transfer recall, without a name. — “Call Transfer”
Restricted	Restringido	The outgoing call is barred.
Room Monitor Off	Cancelar Monitor	“Room Monitor” cancelled.
Room Monitor On	Activar Monitor	“Room Monitor” set.
Set COS Ext201	Clase Ext201	The Walking COS feature is set.
Transfer to CO	Transferir a LN	The destination extension has set “Call Forwarding — to Exchange Line”.
Unlocked	Desbloqueada	“Electronic Extension Lockout” cancelled.
Will Return Soon	Regresare Pronto	Absent Message 1.

2.5 Troubleshooting

If a power failure occurs...

Your system allows certain extensions to make and receive calls on certain lines (Power Failure Transfer) and retains system programming.

Power Failure Transfer

A specific extension will be automatically connected to a specific exchange line. This provides exchange line calls between the following extensions and exchange lines.

Exchange line 1 is connected to extension port 01.
Exchange line 4 is connected to extension port 09.

- All other conversations will be disconnected during a power failure.
- Proprietary telephones (PT) cannot be used during a power failure. A single line telephone will work in the event of a power failure. Connect a single line telephone to the above port.
- When power is restored after a power failure, your system automatically restarts, maintaining as much of the previous system settings as possible.

Problem	Probable Cause	Possible Solution
Nothing is heard in the handsfree mode.	"Headset" mode is selected.	Set the mode to "Handset".
The unit does not ring.	• The exchange line is not programmed to ring. • The Ringer Volume is set to "OFF".	• To program exchange lines, refer to the Installation Manual. • Increase the Ringer Volume. Refer to "Volume Control" in Proprietary Telephone Settings.
The display flashes the following message. `Set Time & Date`	The system internal clock is not working properly.	Contact your maintainer.

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Memo

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Panasonic Business Systems U.K.
Panasonic House, Willoughby Road, Bracknell, Berkshire RG12 8FP

Printed in the United Kingdom **PSQX1709YB** CM1129SM

Quick Reference Cards For Single Line Telephones

MAKING CALLS

- *Intercom Calling:* [Extension No.]
- *Operator Call:* [0] *(or* [9]*)*
- *Outside Calls-Automatic Line Access:* [9] *(or* [0]*)* [Phone No.]
- *Outside Calls-Individual Trunk Group Access:* [Trunk Group No. (81-86)] [Phone No.]
- *System Speed Dialling:* [*] [System Speed Dial No. (00-99)]
- *Personal Speed Dialling:* [#] [Personal Speed Dial No. (0-9)]
- *Redial, Last Number:* [#] [#] *or* [8] [0]
- *Automatic Callback Busy (Camp-On):* [6]
- *Doorphone Call:* [3] [1] [Doorphone No. (1-4)]

RECEIVING CALLS

- *Call Pickup, Directed:* [4] [Extension No.]
- *Call Pickup, Group:* [4] [0]

DURING A CONVERSATION

- *Call Hold / Call Splitting:* [Press the Recall button.]
- *Call Hold Retrieve-Outside calls:* [5] [3] [Exchange Line No.]
- *Call Hold Retrieve-Intercom calls:* [5] [Extension No.]
- *Call Transfer-to Extension:* [Press the Recall button.] [Extension No.]
- *Call Waiting, Answering:* [On-hook] [Off-hook]
- *Paging-All Extensions and Transfer:* [Press the Recall button.] [3] [3] [0]
- *Paging Answer:* [4] [3]
- *Conference (3-party):* [Press the Recall button.] [Phone No.] [Press the Recall button.] [3]

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- *Paging Answer:* [4] [3]
- *Conference (3-party):* [Press the Recall button.] [Phone No.] [Press the Recall button.] [3]

EXTENSION PROGRAMMMING / SETTING

- *Personal Speed Dialling-Store:*
  2 ✳ Personal Speed Dial No. (0-9) Phone No. #
- *Call Waiting-Outside calls-Set:* 7 3 1 1 #
  -Cancel: 7 3 1 0 #
- *Call Waiting-Intercom calls-Set:* 7 3 2 1 #
  -Cancel: 7 3 2 0 #
- *Call Forwarding-All Calls:* 7 1 1 Extension No. #
- *Call Forwarding-Busy/No Answer:* 7 1 2 Extension No. #
- *Call Forwarding-to Exchange Line:*
  7 1 3 Line Access Code (9 or 0, or 81-86) Phone No. #
- *Call Forwarding-Cancel:* 7 1 0 #
- *Electronic Station Lockout-Lock:* 7 7 Lock Code Twice #
- *Electronic Station Lockout-Unlock:* 7 7 Lock Code #
- *Message Waiting-Set:* 7 0 1 Extension No. #
- *Message Waiting-Cancel:* 7 0 2 Extension No. #
- *Do Not Disturb (DND)-Set:* 7 1 4 #
- *Do Not Disturb (DND)-Cancel:* 7 1 0 #

PLACE FOR OTHER FEATURES:

EXTENSION PROGRAMMMING / SETTING

- *Personal Speed Dialling-Store:*
  2 ✳ Personal Speed Dial No. (0-9) Phone No. #
- *Call Waiting-Outside calls-Set:* 7 3 1 1 #
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- *Message Waiting-Cancel:* 7 0 2 Extension No. #
- *Do Not Disturb (DND)-Set:* 7 1 4 #
- *Do Not Disturb (DND)-Cancel:* 7 1 0 #

PLACE FOR OTHER FEATURES:

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PSQX1753ZA KK0999CM0

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Panasonic

KX-TA624 Feature / Programming Overview

The KX-TA624 has many new and changed features compared with the KX-T30810 / 61610
This Guide is intended to assist installers who are already familiar with the KX-T30810 / 61610
This Guide clearly shows the Changed and New features of the KX-TA624 with reference to KX-T30810 / 61610.

Programming (General overview only) :

NEW

Main Section	Sub - Sections			Programming Step
SYSTEM FEATURES	DATE / TIME Setting the system clock			000
	SPEED DIAL Setting the System Speed Dials			001
	SYSTEM SWITCHING Day / Night / Lunch	MODE		006
		TIME		007
	VOICE MAIL INTEGRATION Voice Mail set-up			102 ~ 103
	SYSTEM TIMERS			200 ~ 213
CO LINE	OUTGOING CALLS	LINE CONNECTED		400
		DIAL MODE		401
		DIAL PULSE SPEED		402
		O/G ASSIGNMENT		405 ~ 407
		ARS (LCR) ASSIGNMENT		350 ~ 389
	INCOMING RINGING MODE Day [414] / Night [415] / Lunch [416]	NORMAL	I/C Ring Pattern	408 ~ 410
			Delayed Ring	411 ~ 413
		DIL (Direct In Line) *Must be used for call FWD*		Enter Jack No.
		DISA / UCD / FAX / OGM		500 ~ 526
JACKS	EXTENSIONS	DSS CONSOLE	Assignment	003 ~ 004
			Transfer Mode	005
		CALL BARRING (COS) TABLES		300 ~ 312
		COS ASSIGNMENT		601 ~ 603
		EXTENSION GROUPS		600
		FEATURES		604 ~ 615
	FAX DETECTION (option required)			503
	TAM EXTENSION (Telephone Answer Machine)			611
	DOORPHONE / OPENER			700 ~ 709

Documentation :

Operating Instructions :	Section 1	Operations
	Section 2	Appendix / Troubleshooting
Installation Manual :	Section 1	Basic System Construction
	Section 2	Installation of System and all Options
	Section 3	Feature descriptions
	Section 4	System Programming steps
	Section 5	Default Tables for program steps
	Section 6	Troubleshooting Guide
	Section 7	Customer Data Programming Tables

Programming note :

System Programming : A Programming Password has replaced the PBX Program Switch (KX-T30810/61610)
(Password Default Setting : '* # 1 2 3 4')
Details in the Installation Manual (Page 4 - 2)

Data Clear Switch : An internal 'Data Clear' switch has been added to the CPU board.
Operation described in the Installation Manual (Page 2 - 34)

CURRENT & CHANGED Programming Steps

(with reference to the KX-T30810 / 61610)

KX-T 30810	KX-T 61610	KX-TA 624	Description	Changed or Enhanced Features
00	00	000	Date / Time	
01	01	001	System Speed Dial	
-	02	003 004	DSS Console Assignment DSS Console Pair Telephone No.	DSS Console and Paired Telephone Assignment are now separate steps
03	04	401	Dial Mode DTMF / Pulse	'Call Blocking' has been added i.e. DTMF is not sent to a pulse mode CO line when dialling from a MF telephone.
04	05	006	System Switching Mode Automatic / Manual	
05	06	007 Day / Night / Lunch	System Switching Time	'Day of week' & 'Lunch Start / End' times added
06	07	405	Flexible Outward Dialling - Day	
07	08	406	Flexible Outward Dialling - Night	
-	-	407	Flexible Outward Dialling - Lunch	'Lunch' Mode added
08	09	408	Flexible Ringing Assignment - Day	
09	10	409	Flexible Ringing Assignment - Night	
-	-	410	Flexible Ringing Assignment - Lunch	'Lunch' Mode added
10	11	601	Call Barring Class Assignment - Day	COS assignment added for Day / Night / Lunch Modes
	12	602	Call Barring Class Assignment - Night	
		603	Call Barring Class Assignment - Lunch	
11	13	302 ~ 305	Call Barring - Deny Codes	COS levels 4 & 5 added
33	14	306	Call Barring - Allow Codes	COS levels 4 & 5 added
14	16	-	Automatic Answer Mode	Set by extension user (Operating Instructions Page 1-35)
-	17	403	Host PBX Access Codes	
-	19 Ext. / CO	-	Programmable Call Waiting	Set by extension user (Operating Instructions Page 1-45)
-	20	411 412 413	Delayed Ringing Assignment - Day Delayed Ringing Assignment - Night Delayed Ringing Assignment - Lunch	Delayed Ringing assignment added for each mode
-	21	411 ~ 413	Delayed Ringing count	Included in Program Steps 411 ~ 413
21	22	-	Intercom Alert Tone (Voice / Tone)	Set by extension user (Operating Instructions Page 1-82)
22	23	700 701 702	Doorphone Ringing Assignment - Day Doorphone Ringing Assignment - Night Doorphone Ringing Assignment - Lunch	Doorphone Ringing assignment added for each mode
23	24	127	Dial Call Pickup	Sets the Pickup Groups for Extns.
17	26	204	Call Duration Count Start Timer	
-	27	800 ~ 801	SMDR Communication Parameters	
-	29	802	SMDR Incoming / Outgoing Selection	

CURRENT & CHANGED Programming Steps

(with reference to the KX-T30810 / 61610)

KX-T 30810	KX-T 61610	KX-TA 624	Description	Changed or Enhanced Features
25	30	-	Hold Time Reminder	Preset to 15 secs
26	31	200	Hold Recall Time Set	
27	32	106	External Pager Access Tone	
29	33	-	Programmable Secret Speed Dials	Separate 'Secret' table not provided Refer to 'Secret Dialling' (Installation Manual Page 3 – 62)
18	34	418	Recall Time	No Earth Recall Option
19	35	422	Disconnect Time	
20	36	420	Calling Party Control	
-	37	005	DSS Button Mode With / Without transfer	
28	38	107	DTMF Receiver Check	
12	39	201	Transfer Recall Time	More time options added (15secs / 30secs / 1 min / 2mins)
-	40	-	F3 / FWD Key Sets F3 to a FWD Key	Set by extension user (Operating Instructions Page 1-12)
31	42	419	Automatic CO Line access Outgoing	
-	43	-	Programmable Call Waiting Tone Type	Set by extension user (Operating Instructions Page 1-7)
34	-	703 704 705	Door Opener Assignment - Day Door Opener Assignment - Night Door Opener Assignment - Lunch	Door Opening can now be assigned for each Mode
70	70	350	ARS Enable / Disable	Enabled on an individual CO basis
-	71	351 ~ 354	First Digit of ARS Code	
-	-	300	Carrier Excepted Codes, disregards codes when applying ARS or Call Barring	i.e. Call blocking code (*141)
71	72	355 ~ 358	Carrier Codes Assignment	Stored Carrier Codes are disregarded
72	73	381 ~ 384	Authorisation Code	
73	75	-	Carrier Access Code	Sets the Access Code
		360	ARS Modification – Remove Digits	Removes digits before sending
		361	ARS Modification – Added Digits	Adds digits before the dialled number
-	-	362	ARS Dial Tone Pattern	Selects the Dial Tone generated
-	-	363	ARS Interdigit Time	Assigns the wait time for ARS
-	-	364	ARS Trunk Group	Assigns the trunk group used by ARS
74	74	385 ~ 388	Itemised Bill by Extension	
		389	Assigns the Bill code to each Extension	
75	76	359	BT Access Code	
98	98		Station Program Clear	Set by Extension user (Operating Instructions Page 1-7)
99	99	999	System Data Clear	

NEW Programming Steps

(with reference to the KX-T30810 / 61610)

Step	Program Title	Feature Description	Default
002	System Password	Replaces the PBX Programming Switch (Installation Manual Page 4 –3)	* # : System Prog 1234 : Password
008	Operator Assignment	Assigns the System Operator Telephone	Jack : 01
009	Extension Number Assignment	Allows the extension numbering scheme to be changed	Jack 01 (Ext. 201) 24 (Ext. 224)
010	LCD Time Display Selection	12 / 24 hour clock display options	12 HOUR
011	Speed Dial Number Set	Used for Speed Dials and Call ID Feature	Not stored
012	Alternative Feature Number Plan	Replaces feature with a code 50 ~ 59	Not stored
100	Hunt Group	Enables Station Hunting for Extension Groups	All groups : Disabled
101	Station Hunt Type	Assigns Hunting Type for Extension Groups	All groups : Terminate
102	Voice Mail Port	Enables Jacks (assigned as Voice Mail Ports) to send DTMF signalling to Voice Mail	Jacks 07 / 08 / 15 / 16 : Disabled
103	Voice Mail Port DTMF Integration	Enables signalling of Call Status information to Voice Mail ports (busy, answered, ringing, etc.)	Disabled
104	Hold Mode Selection	Assigns Call Hold Mode for SLT extensions (Example - HOLD 1 : Recall + on-hook)	HOLD 1
105	Conference Tone	Confirmation Tone sent at the Start and End of a Conference Call	Enable (send)
108	Recall Mode of a Station Locked Extension	Allows locked extensions to send a Recall signal whilst talking to an external call	Disabled (not allowed)
109	CO Indicator Assignment	Allows an extension, not programmed to ring [408 – 410] to receive the call by pressing the CO Line button	Enable (Allow)
110	Recall Key Mode	Mode1: Sends Recall signal time (Prog. Step 418) Mode2: Recall signal is sent while the button is pressed	Mode 1
111	Hold Music Selection External Music / Tone	Assigns External Music or Tone (Beep)	External Music
112	DSS Console Indication Mode (for FWD / DND)	Assigns if an extension set as FWD/DND shows as a flashing button on the BLF/ DSS	Enable (Flashing)
115	Extension Ringing Pattern Selection	Sets Single / Double / Triple Ring Pattern	Single
116	Conference Pattern Selection	Set the max. number of parties in a conference	5 party (C-2 E-5)
117	Call Pick-up Tone	Confirmation tone sent when the Call Pickup feature is used	Enabled (Tone)
118	Pulse Restriction	Enables / Disables pulses being sent to the CO Line during a conversation (when Call Block is set in program step 401)	Enable
119	Redialling after Pulse / Tone conversion	Allows Redial to use tone dialling on a pulse CO Line if the call had used * and # to convert to Tone	Disable
120	Bell Frequency	Sets the Bell Frequency for an SLT device	25 Hz
121	Automatic Line Access Number	If set at ‘0’ Operator call becomes ‘9’	Dial 9
122	Auto Rotation of Line Access	Auto rotation of CO lines seized	Disabled (no rotate)
123	Break Ratio	Sets the break ratio to CO lines	Mode 1 (66%)
124	SLT Ring Mode	Length of SLT Ring Cycle	Mode 2 (3 sec)
125	Call Barring Check for * , #	Assigns if * and # are checked by the COS program	Enable (Check)
126	DSS Off-Hook Mode	Making Intercom call by pressing DSS key	Enable
202	Call Forward Start Time	Call FWD no answer timer Options : 5 / 10 / 15 / 20 secs	15 secs
203	Pickup Dial Delay Time (Hot Telephone)	Auto Dial time delay Options : 1 / 2 / 3 / 4 secs	3 secs
206	Dial Start Time	Time between seizing a CO Line and digits being sent Range : 0 ~ 1500 milliseconds	0 mS
207	Recall Timing Range	Sets the Range for Extensions - SLT	Mode 1 (50 ~ 180 mS)
208	Interdigit Time	Maximum time allowed between digits when dialling out. Options : 5 / 10 / 15 secs	20 secs (Prior to disconnection)
210	DTMF Time	Assigns the minimum duration	Mode 1 (80 mS)

NEW Programming Steps

(with reference to the KX-T30810 / 61610)

Step	Program Title	Feature Description	Default
211	No Dial Disconnection	Call disconnects if 1st Digit is not dialled within 20 seconds of seizing a CO Line	Enable (disconnect)
212	CO Line Duration Limit	Sets maximum CO call time (Enabled Prog 613)	10 mins
213	Bell Off Detection	Sets the wait time between bell signals from CO line	3 secs
301	Call Barring – System Speed Dial Boundary Class	Assigns the call barring class for System Speed Dial Numbers	Class 1
309	Emergency Dial Number Set	Stored 'Emergency' telephone numbers override the following : 'COS Level' / 'Account Code Modes' / 'Electronic Extension Lock'	Locations 01 : 999 02 : 112 03 ~ 05 : Not stored
310	Account Codes	Assigns Account Codes for 'Verify - All' mode	01 ~ 24 : Not stored i.e. 01 : 1234
311	Automatic Pause Insertion Codes	40 codes can be assigned as Pause Codes. Pause [duration prog. step 417] is inserted after the code	01 ~ 40 : Not Stored i.e. 01 : 1234567
312	Call Barring – Extension Lock	COS level applied to Locked Extensions Options : COS Levels 2 / 3 / 4 / 5 / Disabled	Disabled
400	CO Line Connected Assignment	Defines connected CO's	CO 1 ~ 6 : Connected
402	Pulse Speed Selection	Sets CO Line 'Pulse Speed' Options : 10 / 20 pps	10 pps
404	CO Line Group Assignment	Trunk Group assignment of CO's	CO 1 : Trunk Group 1 through to CO 6 : Trunk Group 6
414 to 416	Outside Line Mode (Day / Night / Lunch)	NORMAL : Follows programming steps 408 ~ 410 DIL : Assigns one ext. to receive I/C CO call (must be used if Call FWD is required) DISA1 : The caller will hear a Tone or OGM DISA2 : The caller will hear two different OGM UCD : Call will be rec'd via UCD function	NORMAL
417	Pause Time	Assigns the Host PBX pause time	1.5 secs
421	CPC Detection for Outgoing Calls	Enables CPC detection during an outside call. If CPC is detected, the system disconnects the line (disconnection time Program Step 420)	Disable
423	CO Line Ringing Pattern Selection	Incoming CO Line ringing pattern Options : Single / Double / Triple Ring	Double
424	Reverse (Polarity) Check	Detects CO Line reversal	Disabled
500	DISA Incoming Dialling Mode Selection - Auto Attendant	Without AA System accepts : Ext. / Access No. With AA System accepts : Ext. / Access / AA No.	Without AA
501	DISA Built-in Auto Attendant	Assigns Auto Attendant numbers '0 ~ 9' to extension jacks	0 ~ 9 : Not stored i.e. 0 : Jack 01
502	OGM Mode Selection (KX-TA 62491 required)	Mode 1 ~ 6 DISA or UCD functions can be used to receive IC calls	Mode 1
503	FAX Connection (KX-TA 62491 required)	Assigns an extension to receive FAX calls when CNG is detected	All Jacks : Disabled
504	DISA Delayed Answer Time	Assigns delay in DISA answering a call Options : 0 / 3 / 6 / 12 secs	3 secs
505	DISA Waiting Time after OGM	Selects time the system waits for DTMF or CNG tone after OGM played Options : 0 / 5 / 10 / 15 secs	5 secs
506	DISA Busy Mode	Sets DISA response to a dialled busy extensions Options : Call waiting / Disconnect / play OGM 2	Disconnect
507	DISA Intercept Mode Disconnect / Intercept	Sets DISA response to unanswered calls Options : Disconnect / Intercept	Intercept
508	DISA Ring Time before Intercept	Sets DISA Intercept time for unanswered calls Options : 10 / 20 / 30 / 40 / 60 / 120secs	20 secs
509	DISA Ring time After Intercept	Sets the ring time at the Intercept destination Options : 10 / 20 / 30 / 40 / 60 / 120secs	20 secs
510	DISA No Dial Mode	Selects action taken by DISA if no response is received after OGM (e.g. DTMF or CNG) Options : Intercept / Disconnect	DISA1 : Intercept DISA2 : Intercept
513	Cyclic Tone Detection (OGM option KX-TA62491 required)	Sets the number of times Cyclic Tone has to be detected before the system regards the call as complete Options : Disable (does not detect) / 2 / 3 / 4 times	4 times

NEW Programming Steps

(with reference to the KX-T30810 / 61610)

Step	Program Title	Feature Description	Default
514	Fax Tone Detection (KX-TA62491 option required)	Sets the number of times the FAX / CNG tone has to be detected Options : 1 / 2 Times	1 Time
515	Intercept Time for Internal DISA	Sets intercept time for an internal DISA call Options : 3 / 6 / 9 secs	3 secs
516	DISA Incoming Assignment	Assigns which extensions can receive DISA calls	All jacks : Enable (accept)
517	DISA AA Wait Time	Sets AA second digit wait time If no digit received within this time call is routed by program step 501. Options : 1 / 2 / 3 / 4 / 5 secs	2 secs
519	DISA Mute Time	Assigns the wait time after answering	0 secs
520	UCD Group	Assigns the Extension Group for UCD	Group 1
521	UCD Busy Waiting Time	Assigns the Time the UCD holds an IC call	10 min
522	UCD OGM Message Interval Time	Assigns the Time between messages	1 min
523	UCD Busy Mode	Assigns the operation after [521] Timer expires	Intercept
524	UCD Intercept Time	Assigns the operation when [525] Timer expires	Intercept
525	UCD Ring Time before Intercept	Assigns the UCD Extensions No Answer time	20 secs
526	UCD Ring Time after Intercept	Assigns the Ring time after intercept	20 secs
600	Extension Groups	Sets Extension groups (used for Hunting)	All jacks : Group 1
604	Extension Name Setting	Assigns a name to an extension	Not stored
605	Account Code Entry Mode Option / Forced / Verify - All Verify – Toll	Selects the Account code input mode Optional/Forced/Verify – All : Set if code must be used Verify – Toll : Temporarily changes COS to level 2	Option
606	Call Transfer to CO Line	Permits call transfer to a CO Line	All jacks : Disabled
607	Call Forward To CO Line	Permits calls to be forwarded to a CO Line	All jacks : Disabled
608	Executive Busy Override	Allows a call to barge an established call	All jacks : Disabled
609	Do Not Disturb Override	Permits the Do Not Disturb Override function	All jacks : Disabled
610	Parallel Connection	Permits an SLT to be connected in parallel with a Proprietary Telephone	All jacks : Disabled
611	TAM Extension (Telephone Answering Machine)	Assigns TAM extension Allows Call Retrieval feature	All jacks : Disabled
612	Room Monitor Assignment	Assigns which jacks can be monitored by another proprietary telephone	All jacks : Disabled
613	Exchange Line Duration Limit	Limits the max. time for Extensions	Disabled
614	Internal Pulse Detection	Disables Pulse Detection from Extensions	Enabled
615	LCD Language Assignment	Set the LCD Display language	All jacks : English
706	Doorphone Ringing Tone / Pattern	Doorphone ringing pattern Options : Single / Double / Triple Ring	Triple
707	Doorphone Access Tone Selection	Assigns if a tone is sent to the Doorphone when it is monitored	Doorphones 1 ~ 4 : Enable (send tone)
708	Doorphone Ring Time	Doorphone ringing time Options : 15 / 30 secs	15 secs
709	Door Opener Time	Door unlocked time Options : 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 secs	Doorphones 1 ~ 4 : 5 secs
803	Secret Speed Dialling / One Touch Dial Printing	Enables or disables SMDR printout for these numbers	No printing
804	System Data Dump	Outputs all System Data to SMDR	
805	SMDR Account Code Selection	Sets SMDR Account Code printout CODE : Account code INDEX : The two digit account code location	CODE
806	SMDR Language Selection	Set SMDR Language	English
998	ROM Version	Confirms the System ROM version	No Default